ORDER NO. MD0512482C2

Service Manual

CD Stereo System

SA-AK240E / SA-AK240EB / SA-AK240EG

Colour

(S)... Silver Type

Notes: This model's CD mechanism changer unit is CRS1. Please refer to the original Service Manual (Order No. MD0509368C0) for this mechanism.

SPECIFICATIONS

Specifications

■ AMPLIFIER SECTION

RMS Output power	
THD 10%, both channels driven	
1 kHz	**115 W per channel (3)**
Total output power	**230 W**

■ FM/AM TUNER, TERMINALS SECTION

Preset station	**FM 15 stations** **AM 15 stations**
Frequency Modulation (FM)	
Frequency range	**87.50 to 108.00 MHz (50 kHz steps)**
Sensitivity	**4.0 V (IHF)**
S/N 26dB	**2.2 V**
Antenna terminals	**75 (unbalanced)**
Amplitude Modulation (AM)	
Frequency range	**522 to 1629 kHz (9 kHz step)**
Sensitivity	
S/N 20dB (at 999 kHz)	**560 V/m**
Music Port input jack	
Terminal	**Stereo, 3.5 mm jack**
Sensitivity	**100 mV, 4.7 k**
Phone jack	
Terminal	**Stereo, 3.5 mm jack**

■ CASSETTE DECK SECTION

Track system	**4 track, 2 channel**
Heads	
Record/playback	**Solid permalloy head**
Erasure	**Double gap ferrite head**
Motor	**DC servo motor**
Recording system	**AC bias 100 kHz**
Erasing system	**AC erase 100 kHz**
Tape speed	**4.8 cm/s**
Overall frequency response (+3, -6 dB) at DECK OUT	
NORMAL	**35 Hz to 14 kHz**
S/N ratio	**50 dB (A weighted)**
Wow and flutter	**0.18 % (WRMS)**
Fast forward and rewind time	**Approx. 120 seconds with C-60 cassette tape**

DISC SECTION

Disc played [8 cm or 12 cm]	
(1) CD-Audio (CD-DA)	
(2) CD-R/RW (CD-DA, MP3, WMA formatted disc)	
(3) MP3/WMA	
Bit rate	
MP3, WMA	**32 kbps to 320 kbps**
Sampling frequency	
MP3/WMA	**32 kHz, 44.1 kHz, 48 kHz**
CD-DA	**44.1 kHz**
Decoding	**16 bit linear**
Digital filter	**8 fs**
D/A converter	**MASH (1 bit DAC)**

Pick up	
Wavelength	780 nm
Beam Source	Semiconductor laser
Audio output (Disc)	
Number of channels	2 (Stereo) (FL,FR)
■ GENERAL	
Power supply	
For E/EG only	AC 230 V, 50Hz
For EB only	AC 230 to 240 V, 50Hz
Power consumption	95 W
Power consumption in standby mode	0.5 W
Dimensions (W x H x D)	250 x 330 x 343 mm
Mass	6.9 kg
Operating temperature range	+5 to +35°C
Operating humidity range	5 to 90% RH (no condensation)
■ SYSTEM	
SC-AK240 (E-S)	Music center: SA-AK240 (E-S)
	Speaker: SB-AK240 (EG-S)
SC-AK240 (EB-S)	Music center: SA-AK240 (EB-S)
	Speaker: SB-AK240 (EG-S)
SC-AK240 (EG-S)	Music center: SA-AK240 (EG-S)
	Speaker: SB-AK240 (EG-S)

For information on speaker system, please refer to the original Service Manual (Order No. MD0512445A2)

Notes:

1. Specifications are subject to change without notice. Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

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1. Safety Precautions

1.1. General Guidelines

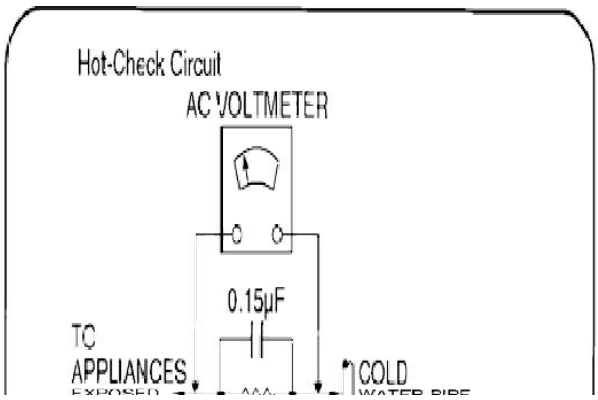
1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, ensure that all the protective devices such as insulation barriers and insulation papers shields are properly installed.

3. After servicing, check for leakage current checks to prevent from being exposed to shock hazards.

1.1.1. Leakage Current Cold Check

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Using an ohmmeter measure the resistance value, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1M Ω and 5.2M Ω . / When the exposed metal does not have a return path to the chassis, the reading must be .

Fig. 1



1.1.2. Leakage Current Hot Check (See Figure 1)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a 1.5k , 10 watts resistor, in parallel with a 0.15 F capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.

6. **The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. Should the measurement is out of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.**

1.2. Caution for AC Mains Lead

(For "EB" area code model only.)

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark or the BSI mark on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover, the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OFF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

Before use
Remove the connector cover.

How to replace the fuse
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.

Figure A

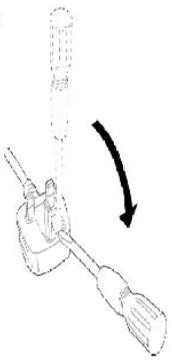


Figure B

1.3. Before repair and adjustment

Disconnect AC power, discharge Power Capacitors C5101, C5104, C5171, C5172, C5920, C5940 and C5950 through a 10 Ω , 5W resistor to ground.
DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.
After repairs are completed, restore power gradually using a variac, to avoid overcurrent.
Current consumption at AC 240V, 50 Hz in NO SIGNAL mode (volume min at CD mode) should be ~ 500mA.

1.4. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.

- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are
"shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.
If this occurs, follow the procedure outlines below:

1. **Turn off the power.**
2. **Determine the cause of the problem and correct it.**
3. **Turn on the power once again after one minute.**

Note :
When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

2. Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

1. **Immediately before handling any semiconductor component or semiconductor-equiped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equiped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**

4. **Use only an anti-static solder remover device. Some solder removal devices not classified as “anti-static (ESD protected)” can generate electrical charge to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.**
6. **Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).**
7. **Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.**
   Caution
   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. **Minimize body motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).**

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety.

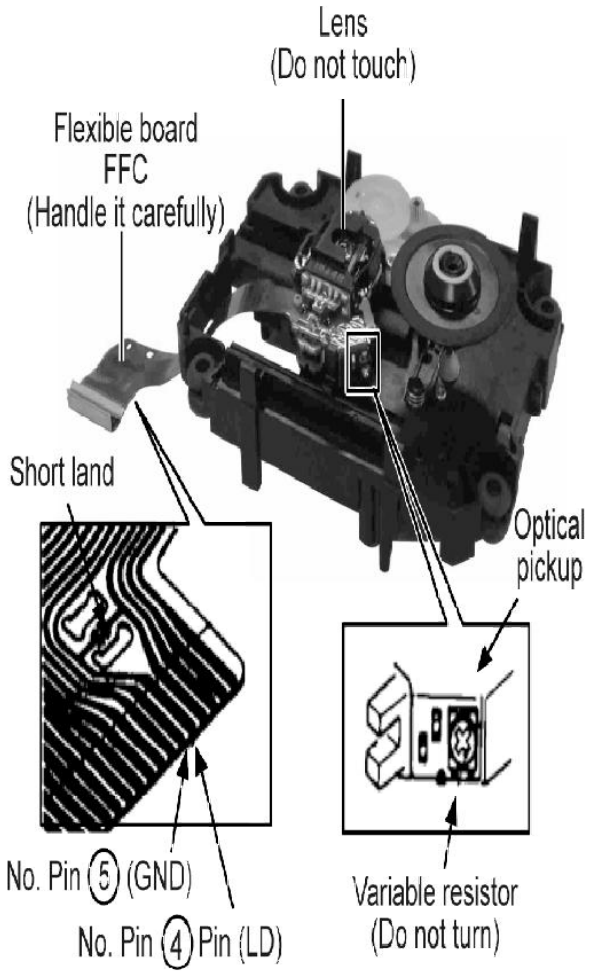
3. Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by the static electricity of clothes or our human body.
So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

- Way of handling the traverse deck (optical pickup)

1. **Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.**
2. **To prevent the breakdown of the laser diode, an antistatic shorting pin is inserted into the flexible board (FFC board).**
3. **Do not to apply excessive stress to the flexible board (FFC board). When removing or connecting the short pin, finish the job in as short time as possible.**
4. **Do not turn the variable resistor for laser power adjustment. (It is pre-**

adjusted during production time)



Grounding for electrostatic breakdown prevention

1. Human body grounding

Use the anti-static wrist strap to discharge the static electricity from your body.

2. Work table grounding

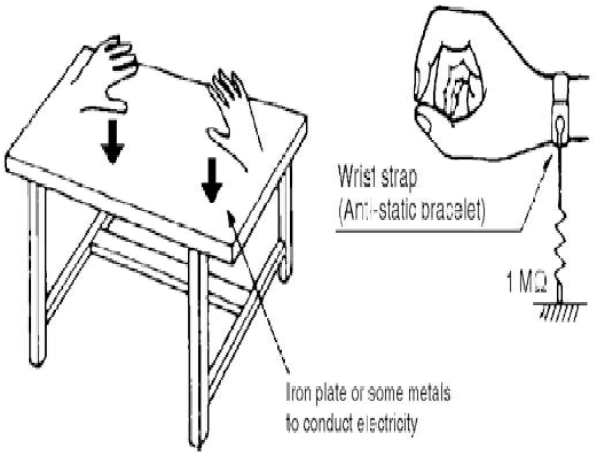
Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is place, and ground the sheet.

Caution :

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

Caution when replacing the Traverse Deck

The traverse deck has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.



4. Precaution of Laser Diode

Caution :

This product utilizes a laser diode with the unit turned "ON", invisible laser radiation is emitted from the pick up lens. / Wavelength : 780 nm / Maximum output radiation power from pick up : 100 W/VDE / Laser radiation from pick up unit is safety level, but be sure the followings:

1. **Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.**
2. **Do not adjust the variable resistor on the pick up unit. It was already adjusted.**
3. **Do not look at the focus lens using optical instruments.**
4. **Recommend not to look at pick up lens for a long time.**

ACHTUNG :

Dieses Produkt enthält eine Laserdiode. Im eingeschalteten Zustand wird unsichtbare Laserstrahlung von der Lasereinheit abgestrahlt. / Wellenlänge : 780nm / Maximale Strahlungsleistung der Lasereinheit : 100 W/VDE / Die Strahlung an der Lasereinheit ist ungefährlich, wenn folgende Punkte beachtet werden:

1. **Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.**
2. **Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.**
3. **Nicht mit optischen Instrumenten in die Fokussierlinse blicken.**
4. **Nicht über längere Zeit in die Fokussierlinse blicken.**

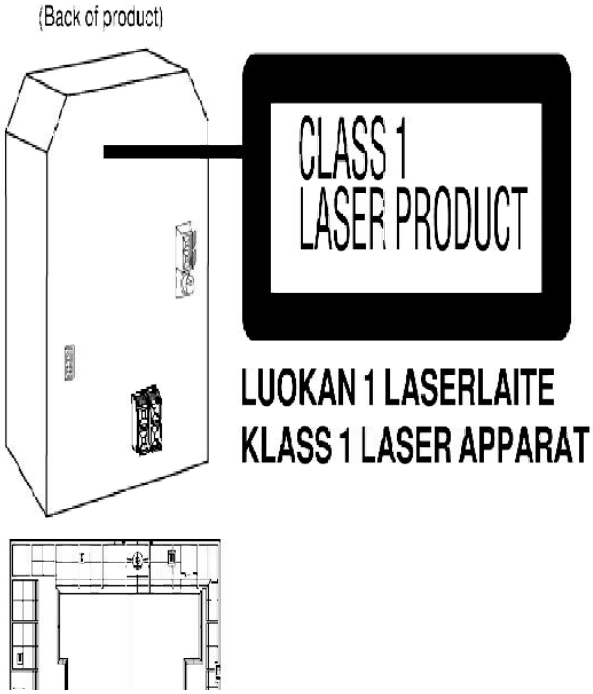
ADVARSEL: I dette a apparat anvendes laser.

CAUTION!

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ Use of caution label



5. Handling the Lead-free Solder

5.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:

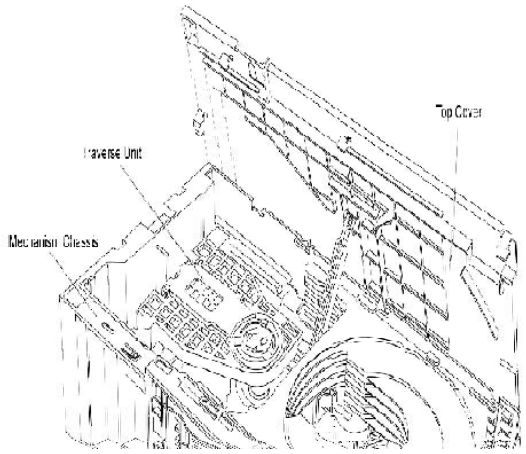
P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

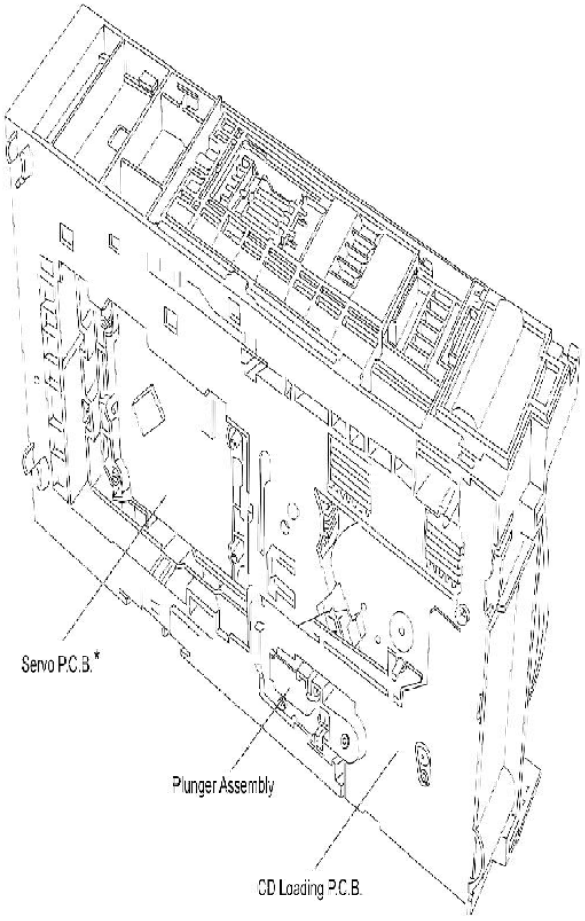
Caution:

- **Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).**
- **Pb free solder will tend to splash when heated too high (about 1100°F/ 600°C).**
- **When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.**

6. New Features

6.1. CRS1 Mechanism Overview





* Illustration for CD Servo P.C.B. (Applied models: SA-AK240/340/640 series)

6.1.1. General Feature

- This is a five disc changer mechanism for CD/DVD. The outline figure is shown below.

- The mechanism has "CHANGE WHILE PLAY" function. It open other trays for disc exchanging while one tray is at PLAY position performing recording or reproducing.

- The mechanism can quickly change all trays with "CHANGE ALL" function. All trays can be move to OPEN position with one operation.
- There is no sensor to indicate presence of disc on any tray.

6.1.2. Hardware composition

- Below is the hardware components of the mechanism

Name	Function
Open Switch (OPEN-SW)	The switch is used to detect normal tray opening
	The switch is used for detect tray being manually push/trigger when full open
Home Switch (HOME-SW)	Is used to detect cam gear home position
Close Sensor (CLOSE-SENSOR)	Used for normal single tray closing
	Used to detect cam gear rotate to Play Driving position
Play Switch (PLAY-SW)	Detect TRV clamping complete position
Stocking Switch (STOCK-SW)	Detect tray completely transfer for play position to stocking position
UD Sensor (UD-SENSOR)	Detect TRV vertical movement position
Top Switch (TOP-SW)	Detect a default position of TRV vertical movement position
Driver IC	To drive Motor
Motor	Main driving source for changer
Plunger	Switching the driving source from motor to: 1. Tray open/close 2. Drive tray to play/stock position and TRV vertical movement

6.1.3. Mechanism Operation

- This mechanism has the following state:

1. Driving of a tray to open/close
2. Up/down operation of a traverse performs a state changes of tray. By using the plunger to lift/release of a switching gear, and the cam gear to lift/release the function gear the motor can be link to several gear trains to perform various operations.

- The functions that can be perform in this mechanism are described as below:

Condition	Explanation
Open current playing tray	The state to change current playing disc. All tray will be open at once and current tray at PLAY position will be expose.
Open All	The state where all trays being driven to OPEN position. The disc can be take in or out from tray to tray by close tray one by one from top to bottom.
Stock	The state where the trays are stored in STOCK position
Play	The state where one of the tray 5 trays is being driven to PLAY position and clamped by traverse unit
Play & Open Tray-*	The state where one of the tray is in playing position performing recording or reproducing, other trays can be used (OPEN position) for disc exchanging without stopping the recording or reproducing process.
Change	The state when one of the opened tray being driven from OPEN position to STOCK position and other opened trays remain still at OPEN position.
Close All	The state where all open trays will being driven from OPEN position to STOCI position, one by one from top to bottom

6.1.4. New CD Mechanism (CRS1)

Note:

This service manual does not contain the following information for the mention CD Mechanism drive:

- **Schematic Diagram, Block Diagram and P.C.B. layout of CD Loading P.C.B.**
- **Part List for individual parts of the mechanism.**
- **Exploded View and Parts List for individual parts of the CD Mechanism drive.**

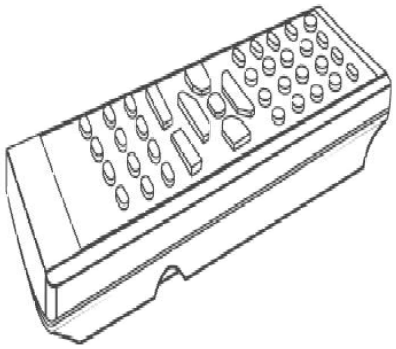
Please refer to the original service manual (Order No. MD0509368C0) for the CD Mechanism Drive CRS1.

6.2. Music Port

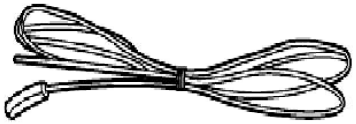
With reference to page 16 of the operating instruction manual.

7. Accessories

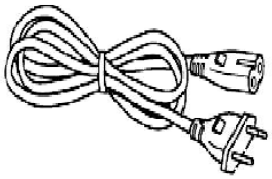
Remote Control



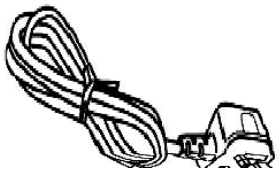
FM Antenna Wire



AC Cord (For E/EG only)



AC Cord (For EB only)



AM Loop Antenna

Antenna Adaptor (For EB only)

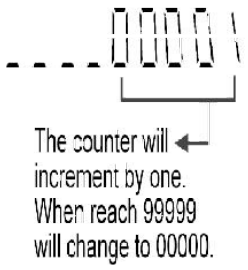
8. Operating Instructions Procedures

9. Self diagnosis and special mode setting

This unit is equipped with functions for checking and inspecting namely: Self-Diagnostic and Test Mode.

9.1. Special Mode Table

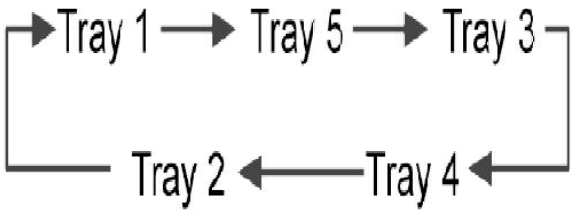
Item		FL Display	Key Operation
Mode Name	Description		Front Key
Self - Diagnostic Mode	To enter into self diagnostic checking for main unit.		1. Select [ ] for TAPE mode (Ensure no tape is inserted). 2. Press and hold [button for 3 seconds follow by [ ]. To exit, press button on main unit or remote control.
CD Test Mode	To enter into checking the reliability of changer unit.		1. Select [ ] for CD mo 2. Press and hold [button for 3 seconds follow by [ ]. To exit, press button on main unit or remote control.
CD Auto Adjustment	To check the CD auto adjustment result for FLOCK, TLOCK and CLVS.		In CD Test Mode: 1. Press [0] button on the remote control. To exit, press button on main unit or remote control.

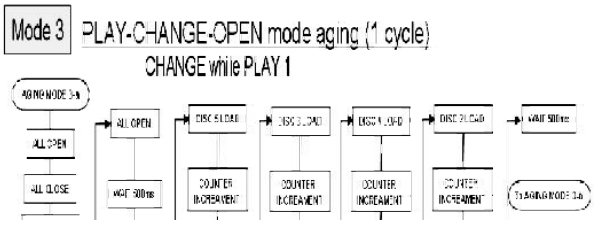
Item		FL Display	Key Operation
Mode Name	Description		Front Key
CD Changer Reliability Test (CRS1)	To determine the reliability of CD Changer Unit. (For more information, refer to section 9.1.1)		In Self-Diagnostic Mode: 1. Select [ ] for CD mo 2. Press [button. To exit, press button on main unit or remote control. (The tray will return to PLAY position and then power off)
Doctor Mode	To enter into Doctor Mode for checking of various items and displaying EEPROM and firmware version.	1. 2. 1. All segments will light up for 1 second. 2. The Check Sum of EEPROM and firmware version will be display. * ROM correction ** Firmware version No:	In any mode: 1. Press [ ] butto on main unit follow by [4] and [7] on remote control. To exit, press [ENTER] button on remote control or button on main unit or remote control.
Cold Start	To activate cold start upon next AC power up.		In doctor mode: 1. Press [4] button on remote control. To exit, press [ENTER] button on remote control or button on main unit or remote control.
Changer Reliability Test	To check the function operation of changer unit. (For more information, refer to 9.1.1)		In doctor mode: 1. Press [DISC] on remote control. To exit, press [ENTER] button on remote control or button on main unit or remote control.

Item		FL Display	Key Operation
Mode Name	Description		Front Key
FL Display Test	To check the FL segments display (All segments will light up and LED will blink at 0.5 second interval)		In doctor mode: 1. Press [DIMMER] button on remote control.
Tape Eject Test	To check on the tape eject function (For deck 1/2)		In doctor mode: 1. Press [PROGRAM] button on remote contro

9.1.1. CD changer unit ageing test mode

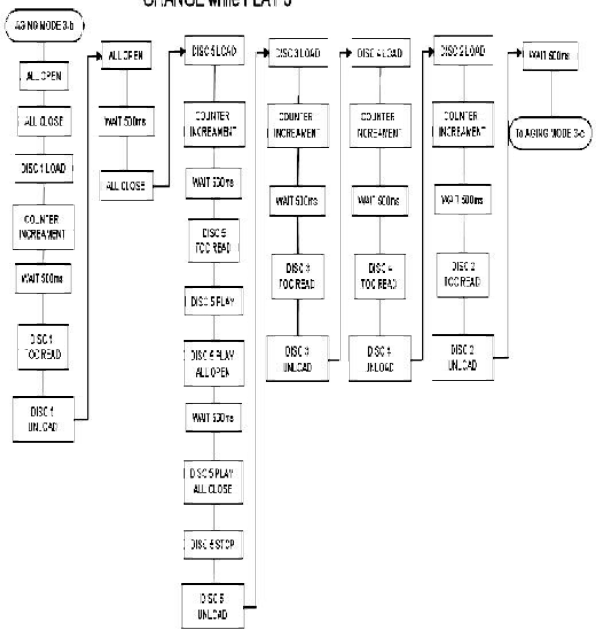
Below is the process flow chart of ageing for the CD changer unit. (CRS1)





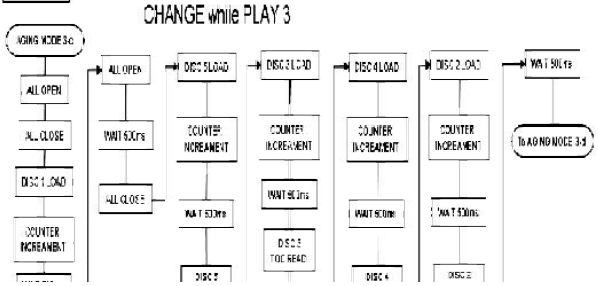
Mode 3 PLAY-CHANGE-OPEN mode aging (1 cycle)

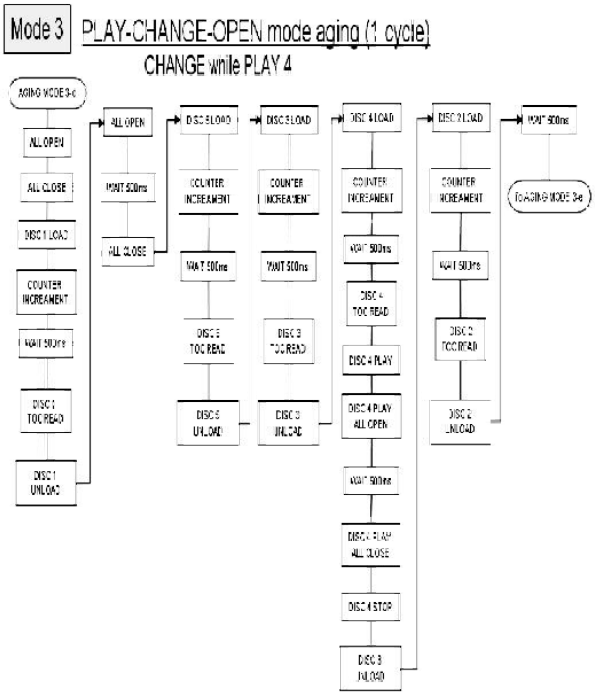
CHANGE while PLAY 5

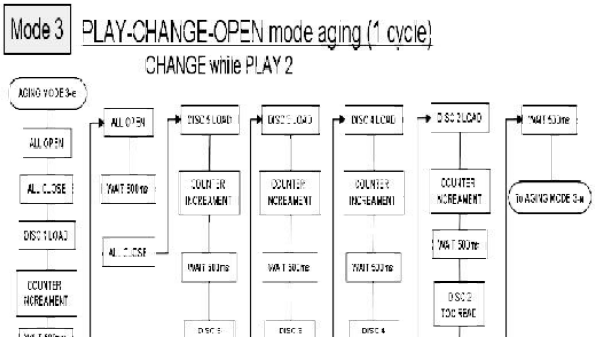


Mode 3 PLAY-CHANGE-OPEN mode aging (1 cycle)

CHANGE while PLAY 3





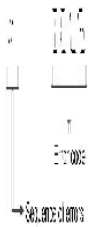
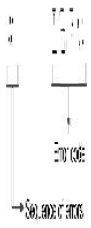
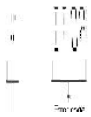


9.2. Error code Table

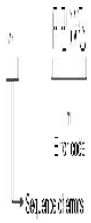
Self-Diagnosis Function (refer Section 9.1) provides information on any problems occuring for the unit and its respective components by displaying the error codes. These error code such as U, H** and F** are stored in memory and held unless it is cleared.**

The error code is automatically display after entering into self-diagnostic mode.

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
H01	Mode SW, plunger and capstan motor abnormal			For deck mechanism unit (Fo deck 1/2). Press [on main unit for next error.
H02	Rec INH SW abnormal			For deck mechanism unit (Fo deck 2). Press [on main unit for next error.
H03	HALF SW abnormal			For deck mechanism unit (Fo deck 1/2). Press [on main unit for next error.
F01 F02	Reel pulse abnormal TPS error		 	For deck mechanism unit (Fo deck 1/2). Press [on main unit for next error.
F15	RESET SW abnormal	REST SW: ON is not detected within the specified time.		For CD unit (For Traverse). Press [on main unit for next error.
F26	Transmission error between CD Servo LSI IC and microprocessor IC	When set to CD mode, the sense signal does not turn “Low”, a fail safe time after system command transmission is sent.		For CD unit (For Traverse). Press [on main unit for next error.
F61	Power Amp IC output abnormal	Upon power on, PCONT=HIGH, DCDET=L after checking LSI.		For power. Press [on main unit for next error.
IHMS	Cam gear abnormality	Cam gear does not rotate to “HOME” position.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
ICSL	Cam gear/gear units abnormal	Cam gear does not rotate to “PLAY” driving position and hence does not drive playing tray to “STOCK” position.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
ISTK	Drive rack/gear assembly abnormal	The tray drive rack does not move to “STOCK” position. (Tray does not move to “STOCK” position)		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
IPLY	Drive rack/gear assembly abnormal	The tray drive rack does not move to “PLAY” position. (Tray does not move to “PLAY” position)		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
ITOP	UD assembly	UD Rack does not move to front direction. This lead to UD base not raise to top position.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
IUDS	UD assembly	After TOP SW is detected, UD rack does not move into tray 1 position.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
HOME	Cam gear/gear assembly abnormal	Cam gear does not move to “HOME” position under following conditions 1. After tray is load to “PLAY” position. 2. After tray is unload to “STOCK” position.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
LOAD	Tray drive assembly abnormal	Tray unit does not move from “STOCK” to “PLAY” position		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
PDRV	Cam gear/gear assembly abnormal	Cam gear does not move from “HOME” to “PLAY” drive position.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
UDU	UD base asssembly abnormal	UD Base assembly does not move upwards from tray 5 to tray 2		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
UDD	UD base asssembly abnormal	UD Base assembly does not move downwards from tray 1 to tray 5.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
UD1	UD base asssembly abnormal	UD Base assembly does not move to tray 1.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
F1NG	Fail - safe mode. (For open /close tray unit(s))	When the tray open operation is performed, it fails to open. It will automatically close all trays after the time-out by the microprocessor. During this time when it fails, the error code will appear.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.

Error Code	Diagnosis Contents	Description of error	Automatic FL Display	Remarks
F2NG	Fail - safe mode. (For open /close tray unit(s))	When the tray close operation is performed, it fails to close. It will automatically open all trays after the time-out by the microprocessor. During this time when it fails, the error code will appear.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.
SRVC_TRV	To unlock the traverse unit for service	1. All trays set to "STOCK" position 2. Mechanism set to tray 5 3. Cam gear set to "HOME" position		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit.
RSET	Cam gear jam/ close sensor faulty	During tray re-open, the cam gear will rotate in the opposite direction to reset the cam gearposition. When it fails, the error code will appear.		For CD changer unit (CRS1). Press [SINGLE CHANGE] on main unit for next error.

CRS1 Error Code display

1. The errors that occured in CRS1 Mechanism can be recalled and displayed, in the order of the occurence under self-diagnostic (Refer to Section 9.1 for procedures to enter this mode.

- Only the first 5 errors will be memorized (in backup memory). The subsequence error shall be ignored and not memorize.
For system with EEPROM as memory backup,memory space in EEPROM is neccesary.

2. To display all error code memorized
In CRS1 Self-Diagnostic mode, press [SINGLE CHANGE] to display subsequence error code.
It shall repeat after reaching error no. 5.
e.g.:
[1 _ _ _ _ I H M S] [SINGLE CHANGE]

[2 _ _ _ _ I T O P] → [SINGLE CHANGE]
[3 _ _ _ _ H O M E] → [SINGLE CHANGE]
[4 _ _ _ _ L O A D] → [SINGLE CHANGE]
[5 _ _ _ _ _ U D D] → [SINGLE CHANGE]

3. To clear the error code memory
   In CRS1 Self-Diagnostic mode, long press [SINGLE CHANGE] key (2s or more)

10. Assembling and Disassembling

10.1. Caution

Special Note:
This model uses a new CD changer unit CRS1. In this following section does not contain the necessary disassembly & assembly information for the CD changer unit (CRS1) except the disasembly & assembly of traverse unit. Kindly refer to the original service manual for the CD changer unit. (Order No. MD0509368C0).

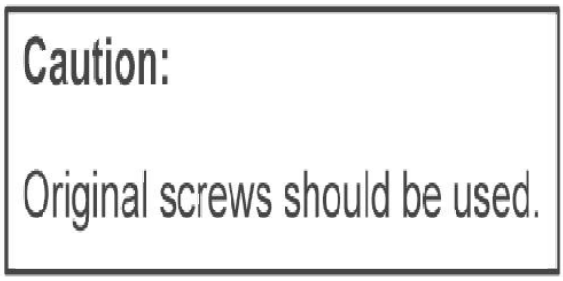
"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures. / Special reassembly procedures are described only when required.
3. Select items from the following index when checks or replacement are required.
4. Refer to the Parts No. on the page of "Parts Location and Replacement Parts List" (Section 22), if necessary.

Warning :-

This product uses a laser diode. Refer to caution statement Precaution of Laser Diode.

Caution:
After replacing of CD Changer Unit, ageing test is necessary. Please confirm operation for CD Changer Unit.



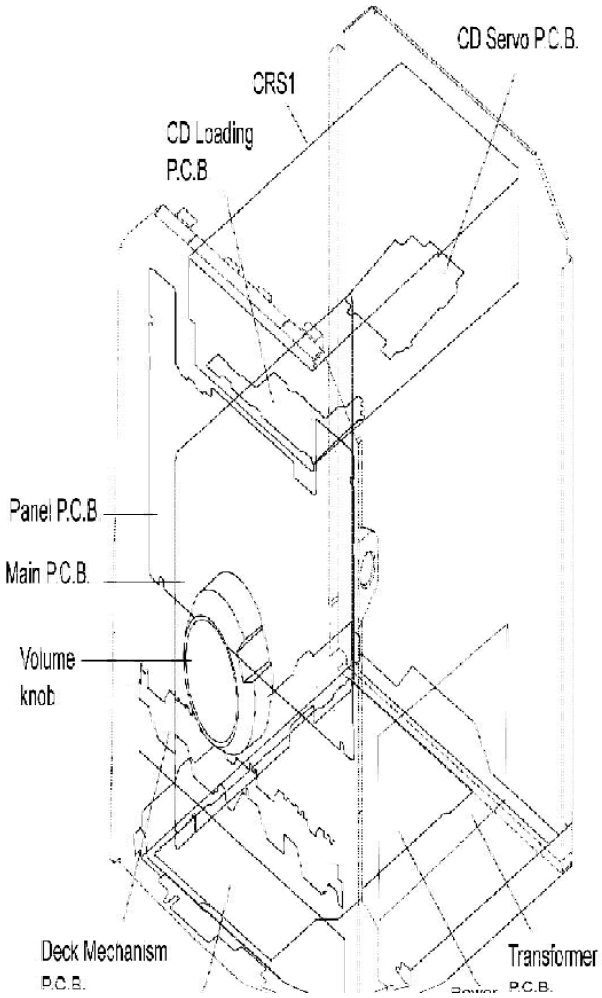
Below is the list of disassembly sections

- **Disassembly of Top Cabinet**
- **Disassembly of Rear Panel**
- **Disassembly of CD Changer Unit**
- **Disassembly of Main P.C.B.**
- **Disassembly of Transformer P.C.B.**
- **Disassembly of Power P.C.B.**
- **Disassembly of Front Panel Unit**
- **Disassembly of Panel P.C.B.**
- **Disassembly of Deck Mechanism Unit**
- **Disassembly for Deck P.C.B.**
- **Disassembly of Traverse Unit**
- **Disassembly of Optical Pickup Unit (CD Mechanism)**
- **Disassembly of Deck Mechanism**
- **Replacement for cassette lid**
- **Rectification for tape jam problem**

10.2. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.
To assemble the unit, reverse the steps shown in the chart as below.

10.3. Main Parts Location



10.4. Disassembly of Top Cabinet

Step 1 Remove 3 screws at each side and 5 screws at rear panel.
Step 2 Lift up both sides of the top cabinet, push the top cabinet towards the rear to remove the top cabinet.

10.5. Disassembly of Rear Panel

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

Step 1 Remove 5 screws.

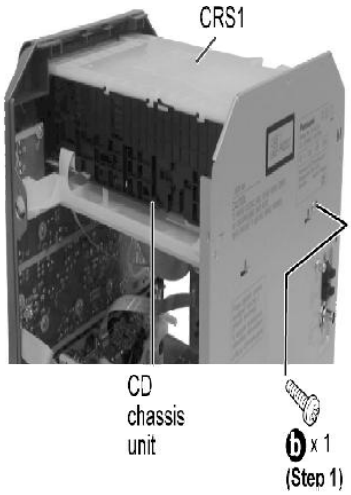
Step 2 Disconnect cable CN2810 (Fan) at Main P.C.B..

Step 3 Remove rear panel.

10.6. Disassembly of CD Changer Unit (CRS1)

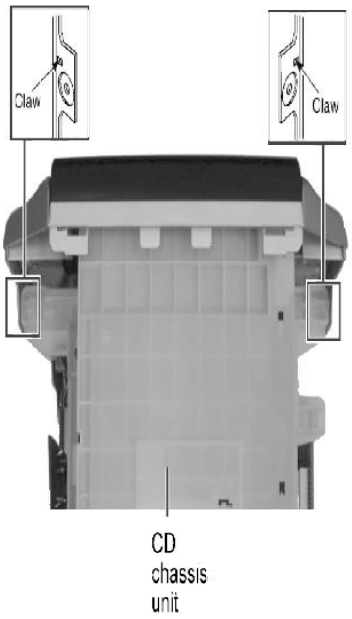
- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

Step 1 Remove 1 screw at rear panel.



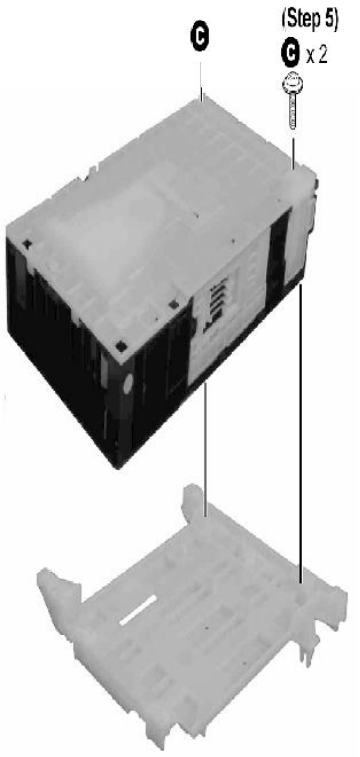
Step 2 Detach the FFC cables (CN2801 & CN2805).

Step 3 Release the claws on both ends.



Step 4 Lift the CD changer unit upwards to remove it.

- Disassembly of Mecha Chassis

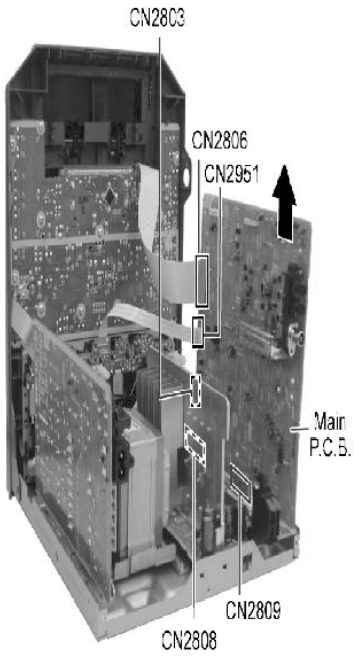


Step 5 Remove 2 screws.
Step 6 Remove the Mecha Chassis.
Note:
For disassembly & assembly of traverse unit, please refer to section 10.14 of this service manual.Please refer to original Service Manual for the Disassembly and Assembly of the CD Changer Unit (CRS1).

10.7. Disassembly of Main P.C.B.

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of Rear Panel

Step 1 Disconnect FFC cables (CN2803, CN2806 and CN2951).



Step 2 Detach connectors (CN2808 & CN2809).
Step 3 Remove Main P.C.B..

10.8. Disassembly of Transformer P.C.B.

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of Rear Panel
- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit

Step 1 Disconnect connectors (CN5950 & CN5951).
Step 2 Remove 3 screws (Mounting screws for transformer to bottom chassis).

Step 3 Push the Transformer P.C.B. sidewards to remove it.

10.9. Disassembly of Power P.C.B.

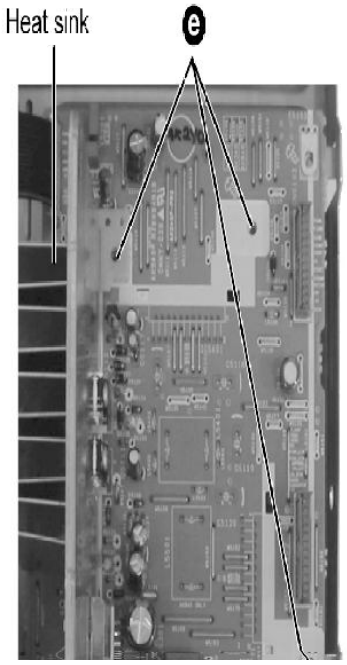
- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit

- Follow the (Step 1) - (Step 3) of Item 10.5 - Disassembly of Rear Panel

- Follow the (Step 1) - (Step 3) of Item 10.7 - Disassembly of Main P.C.B.

Step 1 Remove the 4 screws on Power P.C.B..



Step 2 Detach cable (CN5950) remove the 5 screws on Power P.C.B..

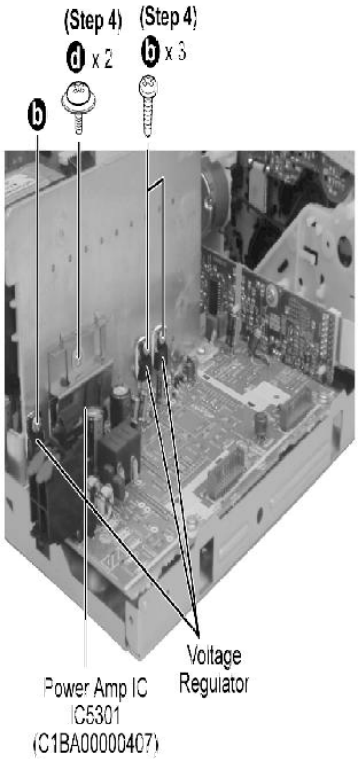
Step 3 Remove Power P.C.B..

Note:

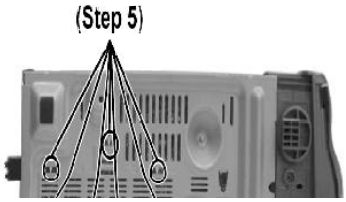
Insulate the Power P.C.B. with insulation material to avoid short circuit.

- Replacement of the Power Amp IC or Voltage Regulator

Step 4 Remove 2 screws at the Power Amp IC and/or 3 screws to Voltage Regulator.



Step 5 Cut the joints with a metal cutter as shown below.



Step 6 Desolder the terminals to replace the components.

Step 7 Fix back the cut portion with a screw as shown.

10.10. Disassembly of Front Panel Unit

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit

Step 1 Disconnect connectors (CN2803, CN2806, CN2951, CN5950 & CN5951).

Step 2 Bent the front panel unit slightly forward as arrow shown.

Step 3 Release 2 claws outwards.

Step 4 Remove the front panel unit.

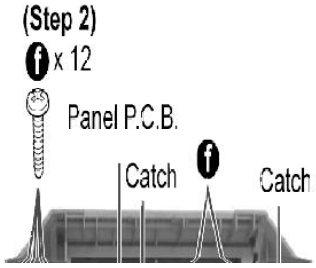
Note: Ensure 2 claws located at the bottom chassis is seated into the 2 slots at bottom of front panel at 2 catches (one on each side) of bottom chassis to be aligned to front panel's slot. Assembly is secured upon hearing clicking sound.

10.11. Disassembly for Panel P.C.B.

- **Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet**
- **Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit**
- **Follow the (Step 1) - (Step 4) of Item 10.10 - Disassembly of Front Panel Unit**

Step 1 Remove the volume knob.

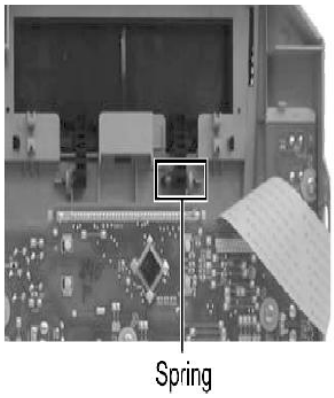
Step 2 Remove 12 screws.



Step 3 Release 2 catches.
Step 4 Remove Panel P.C.B..

10.11.1. Disassembly of Lid

Step 1 Lift the spring sideward.

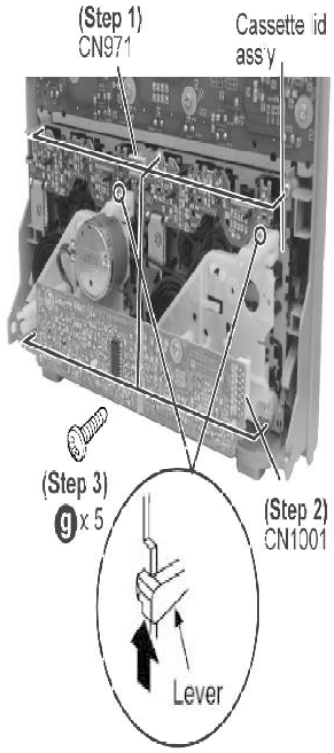


Step 2 Remove Lid.
Note: Do not misplace the spring.

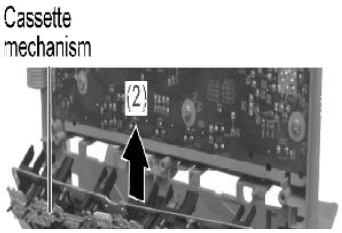
10.12. Disassembly of Deck mechanism unit

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit
- Follow the (Step 1) - (Step 4) of Item 10.10 - Disassembly of Front Panel Unit

Step 1 Detach FFC cable (CN971).
Step 2 Disconnect FFC cable (CN1001).
Step 3 Remove the 5 screws.



Step 4 Push the lever upward, and then open the cassette lid ass'y (For DECK1 and DECK2).

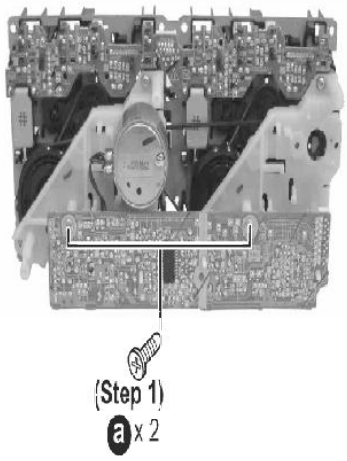


Step 5 Tilt the cassette mechanism unit in the direction of arrow (1), and then remove it in the direction of arrow (2).
Note: For disassembly of parts for deck mechanism unit, refer to Section 10.15.

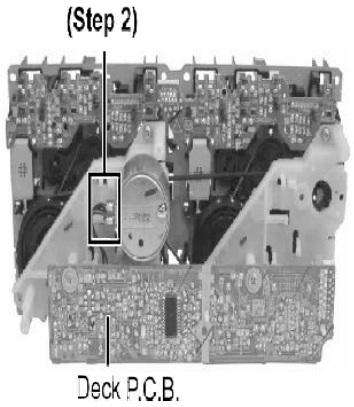
10.13. Disassembly of Deck P.C.B.

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet
- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit
- Follow the (Step 1) - (Step 4) of Item 10.10 - Disassembly of Front Panel Unit

Step 1 Remove 2 screws.



Step 2 Desolder wire at deck motor terminals (W1002).



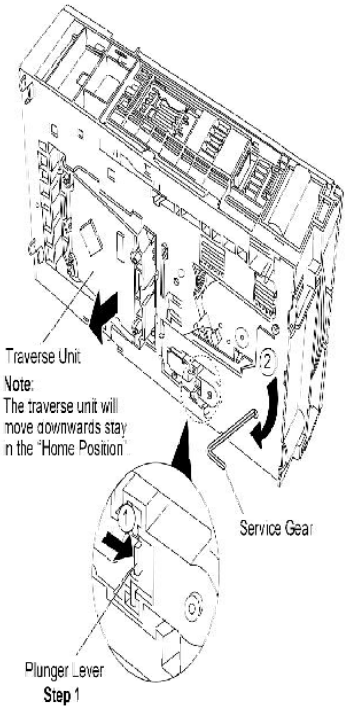
Step 3 Remove Deck P.C.B.

10.14. Disassembly of Traverse Unit

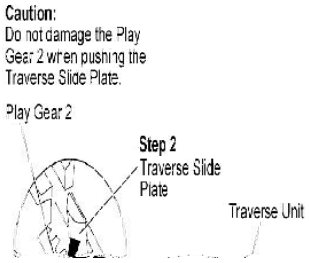
- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit

Important notes: Ensure all the trays are in the "STOCK" position before proceeding to the disassemble of traverse unit. For procedures to set the trays in "STOCK" position, please refer to original Service Manual for CRS1, Section 7. Disassembling Procedure When Tray In Play Position, Order No. MD0509368C0.

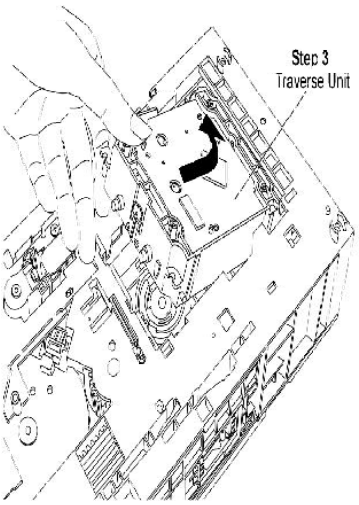


Step 1: Press and hold the plunger lever and rotate the gear as arrows shown until it stop.



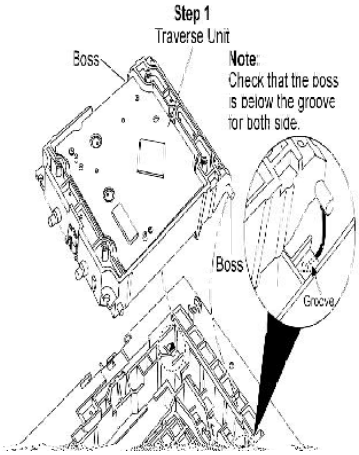
Step 2: Push the traverse slide plate as arrow shown to release the traverse unit.

Caution: Do not exert strong force on the traverse slide plate.

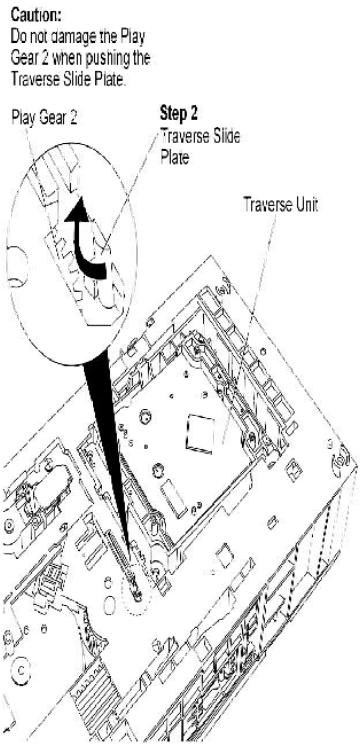


Step 3: Remove the traverse unit as arrow shown.

- Assembly of Traverse Unit



Step 1: Turn over the unit and install the traverse unit.


Caution:
Do not damage the Play Gear 2 when pushing the Traverse Slide Plate.
Play Gear 2
Step 2
Traverse Slide Plate
Traverse Unit

Step 2: Push the traverse slide plate as arrow shown to lock the traverse unit.

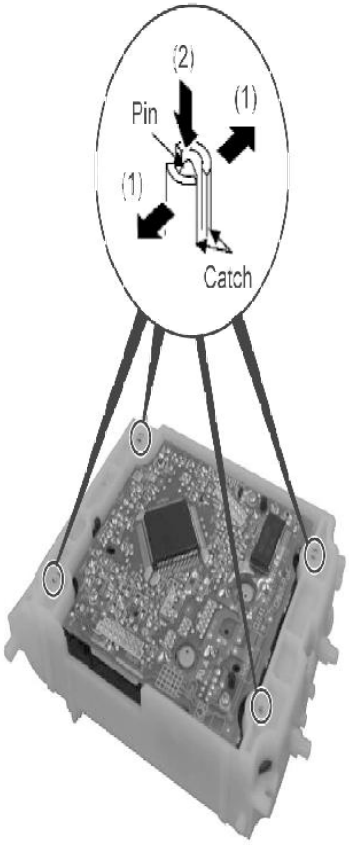
10.15. Disassembly of optical pickup unit (CD mechanism)

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit

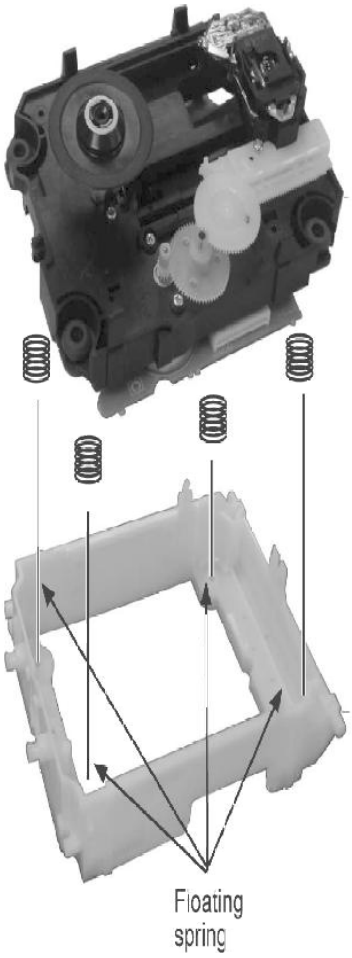
- Follow the (Step 1) - (Step 2) of Item 10.14 - Disassembly of Traverse Unit

Step 1 Pull out FFC.

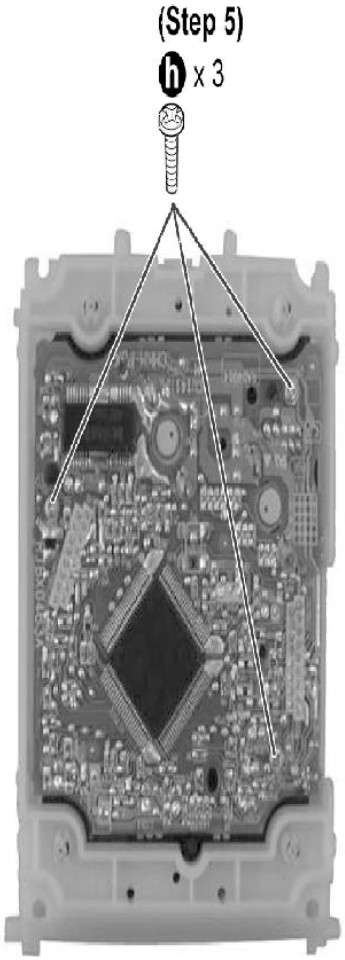


Step 2 Widening the catch, push the pin in.

Step 3 Remove 4 pins.

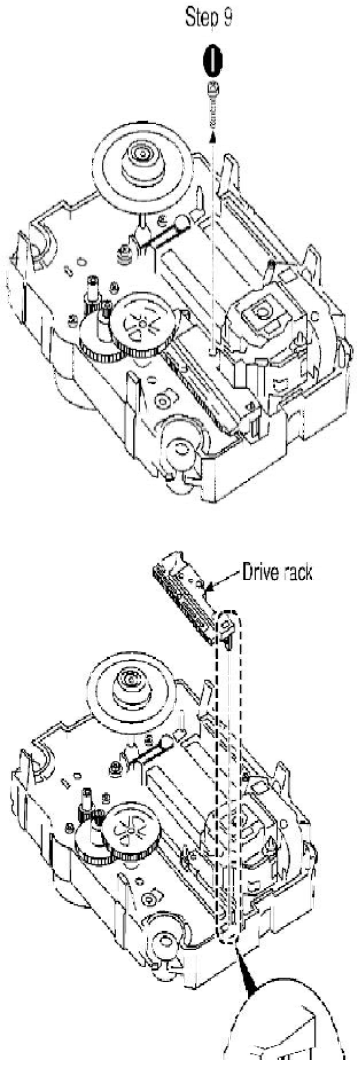


Step 4 Remove the traverse deck.
Note: As floating springs (4 pieces) come off at the same time, be careful not to lose them.

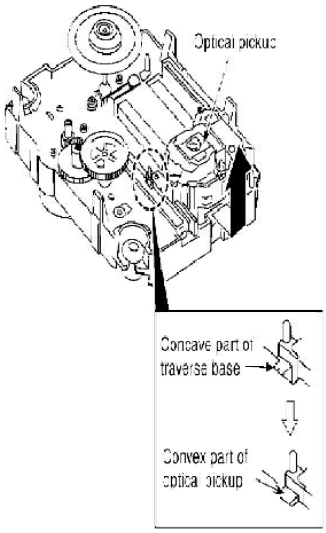


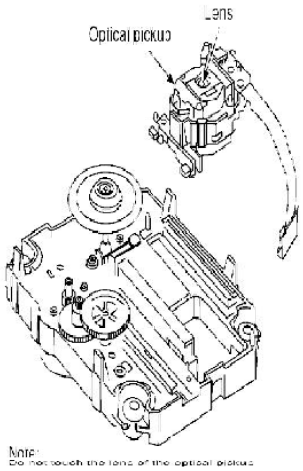
Step 5 Remove 3 screws.
Step 6 Remove the CD Servo P.C.B. and turn it over.
Note: Insert a short pin into FFC of the optical pickup.
Step 7 Rotate the traverse deck (B) to the arrow direction and shift the optical pickup to the furthest backward.

Step 8 Remove the catch of the drive rack, and take out the drive rack.



Step 9 Place the convex part of an optical pickup to the concave part of a traverse base, then take out the optical pickup.





10.16. Disassembly of Deck Mechanism

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

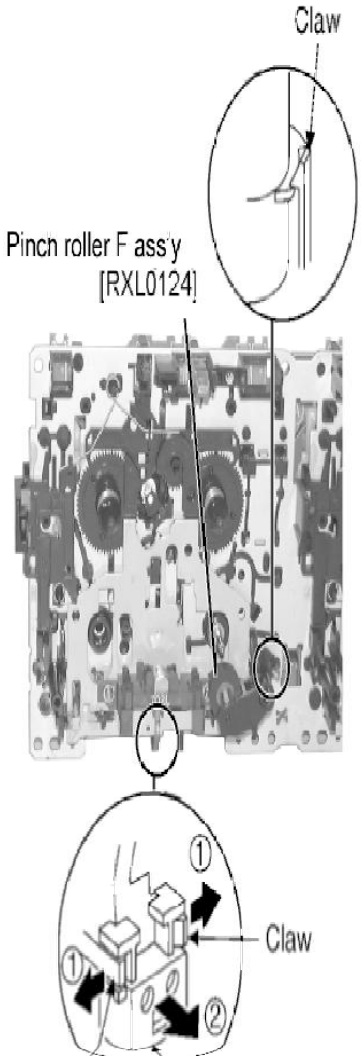
- Follow the (Step 1) - (Step 4) of Item 10.6 - Disassembly of CD Changer Unit

- Follow the (Step 1) - (Step 4) of Item 10.10 - Disassembly of Front Panel Unit

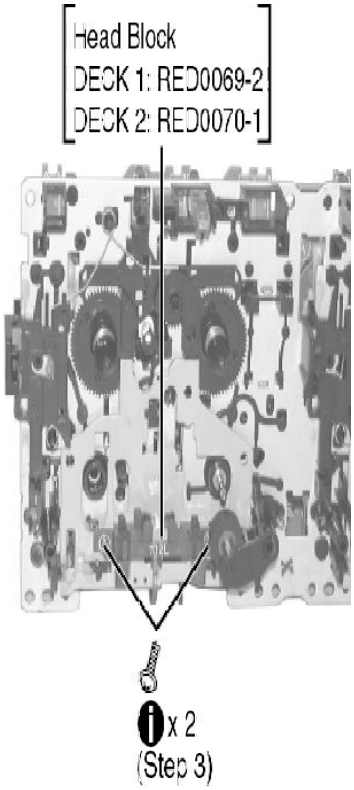
- Follow the (Step 1) - (Step 5) of Item 10.12 - Disassembly of Deck Mechanism Unit

10.16.1. Disassembly of the pinch roller ass'y and head block

*** The mechanism as shown below is for DECK1. For DECK 2, perform the same procedures.**



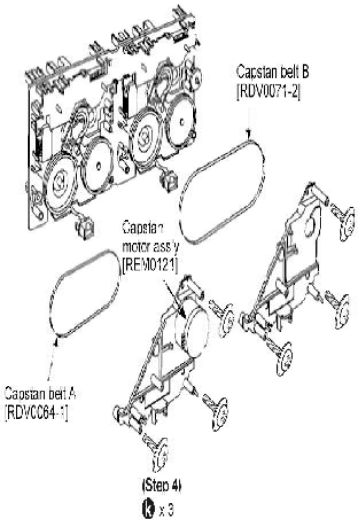
Step 1 Release the catch, and then remove the pinch roller (F).
Step 2 Release 2 claws and detach the head block connector.



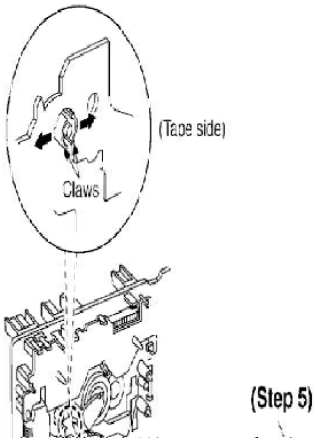
Step 3 Remove 2 screws.
Step 4 Remove head block.

10.16.2. Disassembly of capstan motor ass'y, capstan belt A, capstan belt B and winding belt

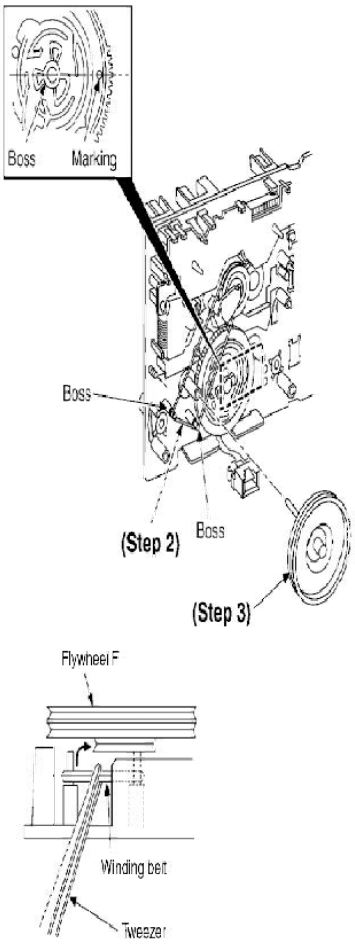
Step 1 Detach the head block connector (Deck P.C.B.).
Step 2 Desolder wire(W1002) at motor assembly.
Step 3 Remove Deck P.C.B.



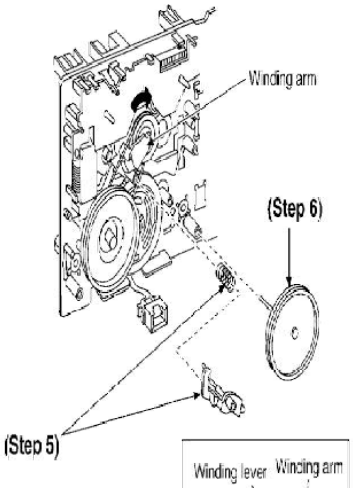
Step 4 Remove 3 screws (for deck 1 & 2).
Step 5 Remove capstan belt A/B.

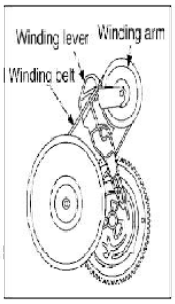


Step 6 Remove the flywheel R.
Step 7 Release the claw and remove the winding lever and spring.
[Installation of the belt]
Step 1 The boss and marking should be positioned horizontally.



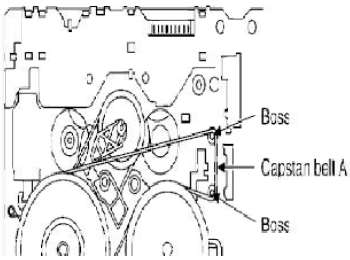
Step 2 Put the winding belt on the pulley temporarily.
Step 3 Install the flywheel F.
Step 4 Put the winding belt on the flywheel F.
Step 5 Install the winding lever and spring while pressing the winding arm in the direction of arrow.
Step 6 Install the flywheel R.



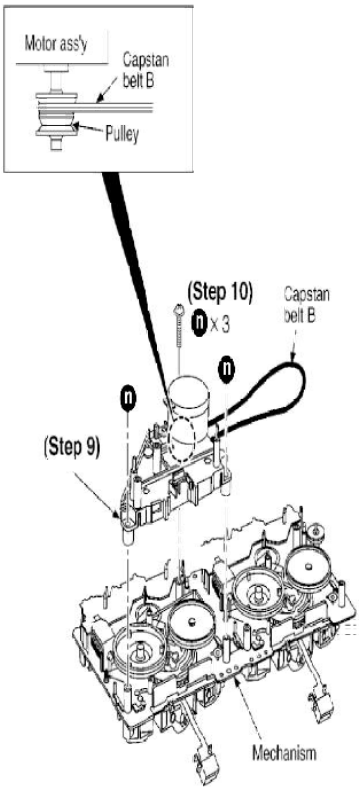


NOTE:
The winding lever should be positioned as shown below.

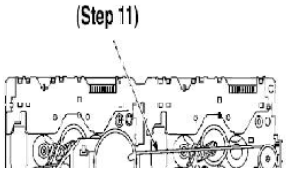
Step 7 Put the capstan belt A temporarily as shown below.



Step 8 Put the capstan belt B on the motor ass'y pulley.
Step 9 Install the sub chassis to the mechanism, and then tighten screws.



Step 10 Install 3 screws.
Step 11 Put the capstan belt B as shown below.

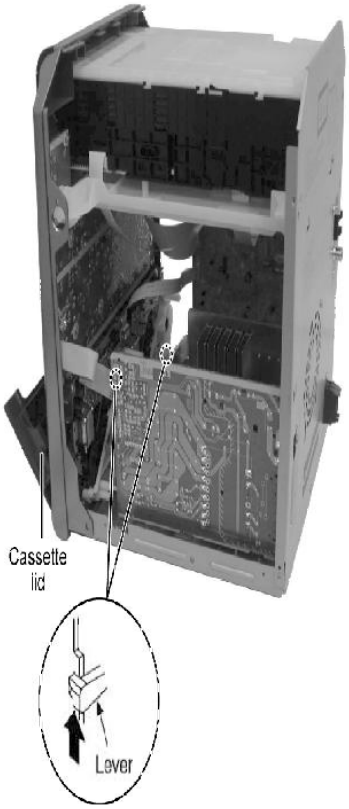


Step 12 Put the capstan belt A on the motor ass'y pulley.

10.17. Replacement for cassette lid

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

Step 1 Lift up the lever upward, open the cassette deck. (For DECK1 and DECK2)

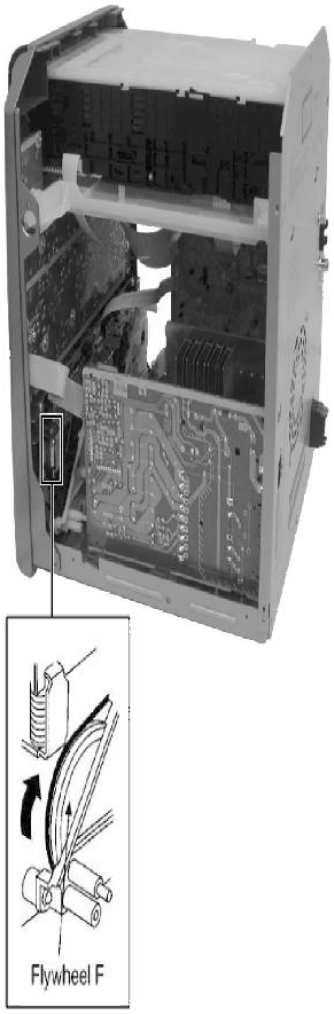


Step 2 Push up the cassette lid (L/R) in the direction of arrow. (For DECK1 and DECK2).

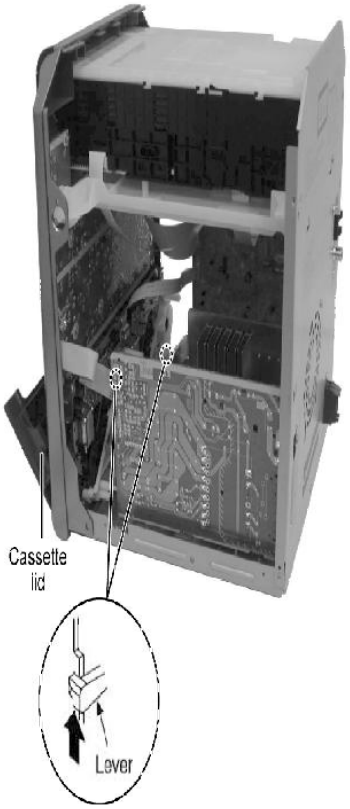
10.18. Rectification for tape jam problem

- Follow the (Step 1) - (Step 2) of Item 10.4 - Disassembly of Top Cabinet

Step 1 If a cassette tape cannot be removed from the deck (the tape is caught by the capstan or pinch roller during playback or recording), rotate the flywheel F in the direction of the arrow to remove it.



Step 2 Push the lever upward and open the cassette lid. Remove the cassette tape.



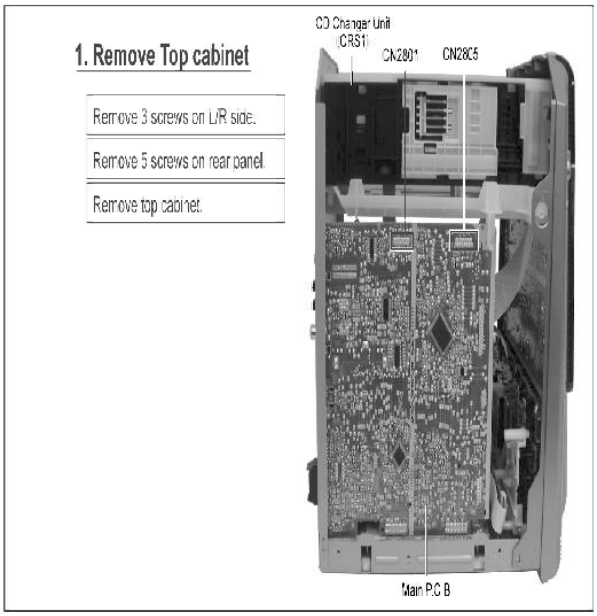
11. Service Fixture and Tools

Service Tools	
Extension FFC	
(A) Deck P.C.B. - Main P.C.B.	**REEX0485 (14 Pins)**
(B) Panel P.C.B. - Deck Mechanism P.C.B.	**REEX0484 (10 Pins)**

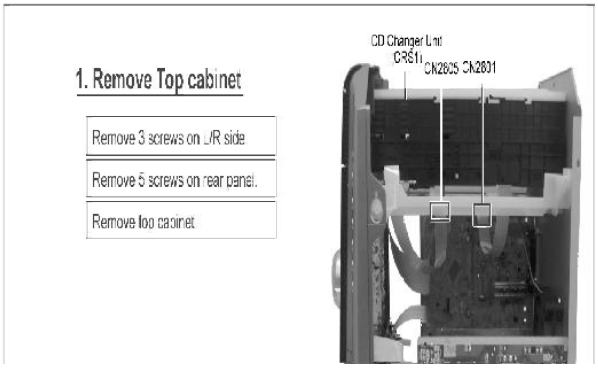
12. Service Positions

Note: For description of the disassembly procedures, see the Section 10.

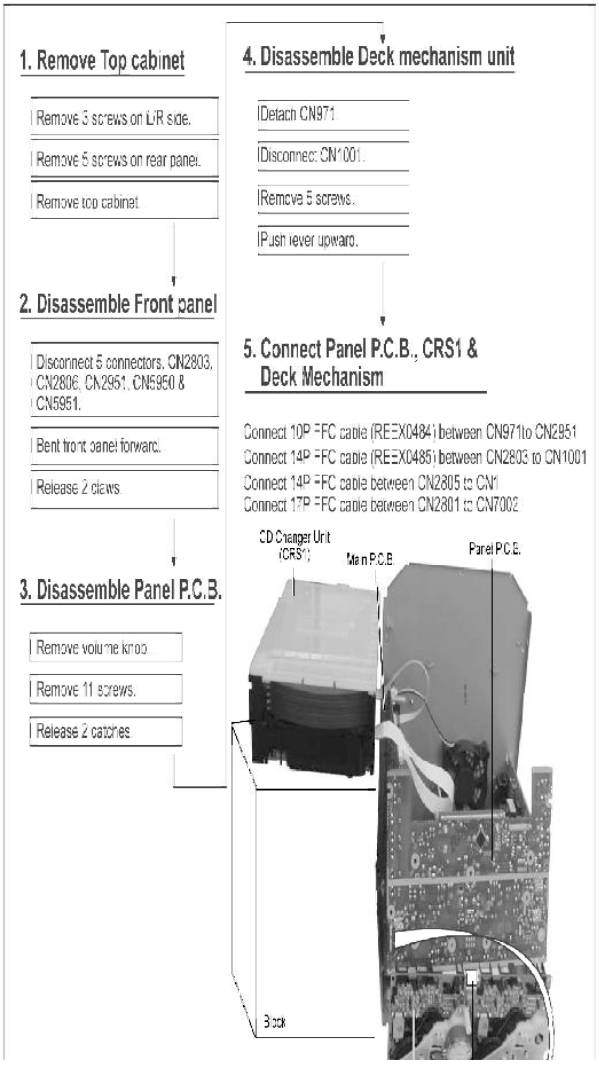
12.1. Checking and Repairing of Main P.C.B.



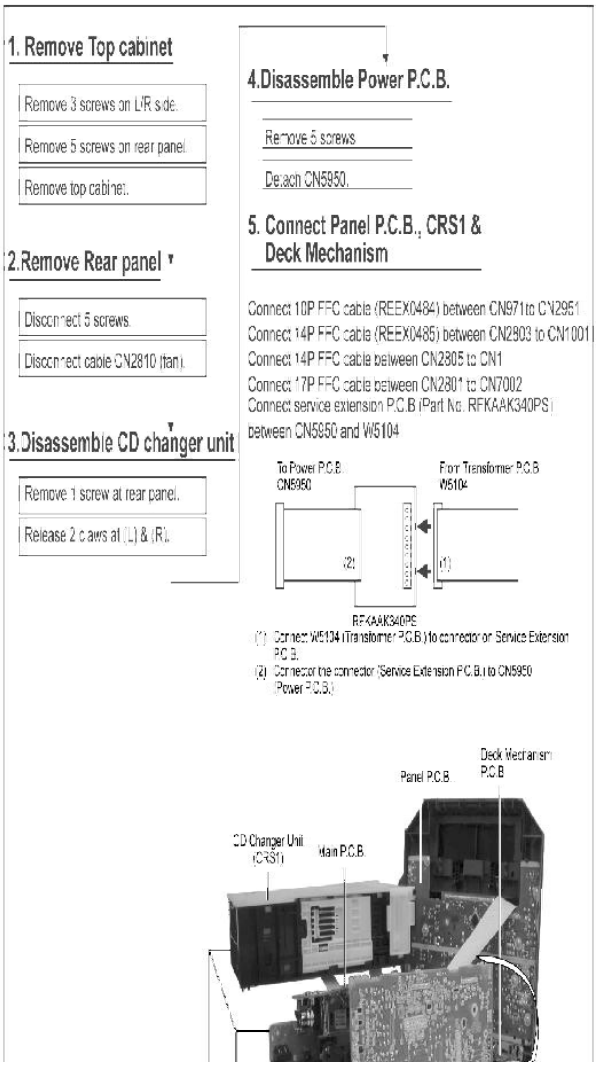
12.2. Checking and Repairing of Transformer P.C.B.



12.3. Checking and Repairing of Panel, Deck & Deck Mechanism P.C.B.


1. Remove Top cabinet
Remove 3 screws on L/R side.
Remove 5 screws on rear panel.
Remove top cabinet.
2. Disassemble Front panel
Disconnect 5 connectors, CN2803, CN2806, CN2951, CN5950 & CN5951.
Bent front panel forward.
Release 2 claws.
3. Disassemble Panel P.C.B.
Remove volume knob.
Remove 11 screws.
Release 2 catches.
4. Disassemble Deck mechanism unit
Detach CN971.
Disconnect CN1001.
Remove 5 screws.
Push lever upward.
5. Connect Panel P.C.B., CRS1 & Deck Mechanism
Connect 10P FFC cable (REEX0484) between CN971to CN2851
Connect 14P FFC cable (REEX0485) between CN2803 to CN1001
Connect 14P FFC cable between CN2805 to CN1
Connect 17P FFC cable between CN2801 to CN7002
CD Changer Unit (CRS1)
Main P.C.B.
Panel P.C.B.
Block

12.4. Checking and Repairing of Power P.C.B.


1. Remove Top cabinet
Remove 3 screws on L/R side.
Remove 5 screws on rear panel.
Remove top cabinet.
2.Remove Rear panel
Disconnect 5 screws.
Disconnect cable CN2810 (fan).
3.Disassemble CD changer unit
Remove 1 screw at rear panel.
Release 2 claws at (L) & (R).
4.Disassemble Power P.C.B.
Remove 5 screws.
Detach CN5950.
5. Connect Panel P.C.B., CRS1 & Deck Mechanism
Connect 10P FFC cable (REEX0484) between CN971 to CN2951
Connect 14P FFC cable (REEX0485) between CN2803 to CN1001
Connect 14P FFC cable between CN2805 to CN1
Connect 17P FFC cable between CN2801 to CN7002
Connect service extension P.C.B (Part No. RFKAAK340PS)
between CN5950 and W5104
To Power P.C.B. CN5950
From Transformer P.C.B. W5104
(2)
(1)
RFKAAK340PS
(1) Connect W5104 (Transformer P.C.B.) to connector on Service Extension P.C.B.
(2) Connect the connector (Service Extension P.C.B.) to CN5950 (Power P.C.B.)
Deck Mechanism P.C.B.
Panel P.C.B.
CD Changer Unit (CRS1)
Main P.C.B.

13. Adjustment Procedures

13.1. Cassette Deck Section

- Measurement Condition

- Reverse-mode selector switch:
- Deck Tape Select: NORMAL
- Make sure head, capstan and press roller are clean.
- Judgeable room temperature 20 ± 5 °C (68 ± 9°F)

- Measuring instrument
- EVM (DC Electronic voltmeter)
- Digital frequency counter
- Test Tape
- Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT

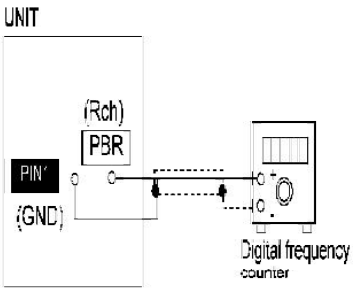
13.1.1. Tape Speed Adjustment (Deck 1/2)

1. Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.
2. Adjust Motor VR (DECK 2) for the output value shown below.

Adjustment target: 2910 ~ 3090 Hz (NORMAL speed)

3. After alignment, assure that the output frequency of the DECK 1 FWD are within ±60 Hz of the value of the output frequency of DECK 2 FWD.

Fig. 1



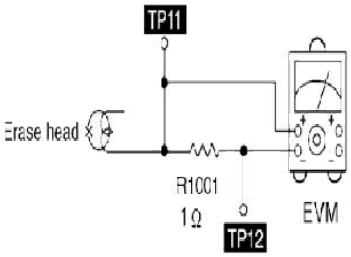
13.1.2. Bias Voltage Check

1. Set the unit “AUX” position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit to “REC” mode (use “ REC/STOP” key).
3. Measure and make sure that the output is within the standard value.

Bias voltage for Deck 2	14±4mV (Normal)

Fig. 2

Fig. 3

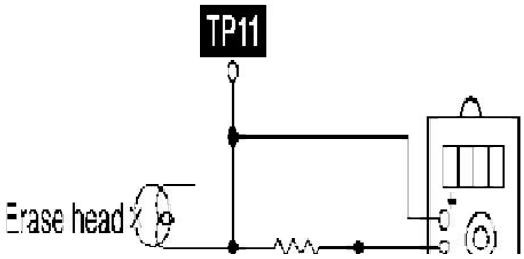


13.1.3. Bias Frequency Adjustment (Deck 1/2)

1. **Set the unit to "AUX" position.**
2. **Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to "REC" mode (● use "REC/STOP" key).**
3. **Adjust L1002 so that the output frequency is within the standard value as below.**

Standard Value: 89 ~ 110 kHz

Fig. 4



13.1.3.1. Cassette Deck Section

Below is the locations of test points for Deck P.C.B.:-

13.2. Tuner Section

This section include details on the alignment of AM-IF and AM RF adjustment.

13.2.1. AM-IF Alignment

1. **Set up the equipments as shown in Fig. 5.**

2. Select [TUNER] mode on selector and set to [AM] mode.
3. Apply signal as shown in Fig. 5 from AM-SG.
4. Adjust Z2602 accordingly so that the output frequency is maximized at 450kHz in Fig. 6.

Fig. 5

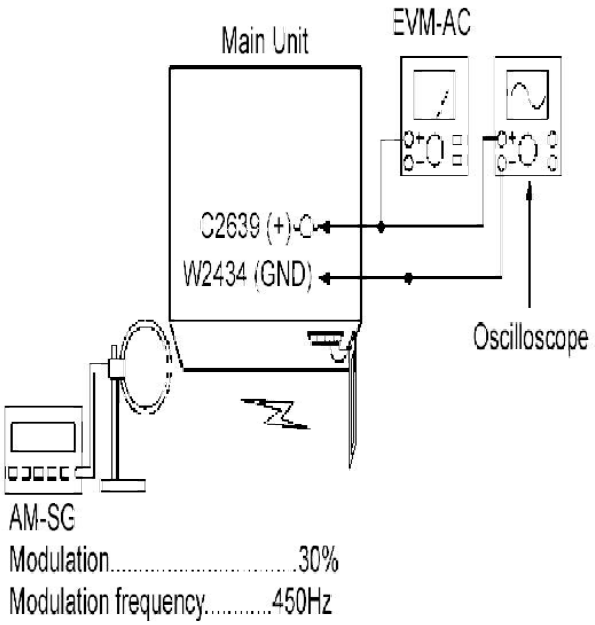


Fig. 6

13.2.2. AM RF Adjustment

1. Set up the equipments as shown in Fig. 7.

2. Select [TUNER] on selector and set to [AM] mode.

3. Set AM-SG to 520kHz.

4. Receive 520kHz in the unit.

5. Adjust L2601 (OSC) so that the EVM-AC is maximized.

6. Set AM-SG to 600Hz.

7. Receive 600Hz in the unit.

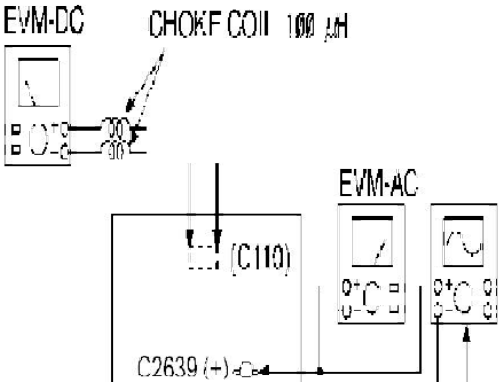
8. Adjust L2601 (ANT) so that the EVM-SG is maximized.

9. Set AM-SG to 520kHz.

10. Receive 520kHz in the unit.

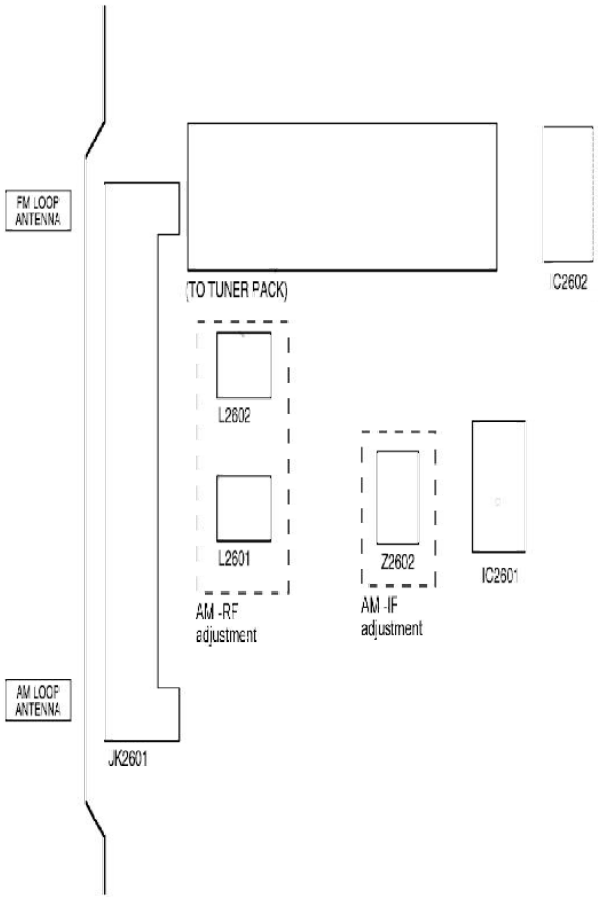
11. Adjust L2602 (OSC) so that the EVM-DC value is with 1.1±0.5V.

Fig. 7



13.2.3. Adjustment Point

Below is the locations of alignment points on the Main (Tuner) P.C.B.



14. Voltage and Waveform Chart

Note:

Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point, because it may differ from an actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

14.1. CD Servo P.C.B. & Main P.C.B.

14.2. Power P.C.B. & Transformer P.C.B.

14.3. Waveform Chart

15. Wiring Connection Diagram

16. Block Diagram

17. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

17.1. Notes of Schematic Diagrams

Note:

S951

: MODE Switch

S952
: HALF Switch

S971
: MODE Switch

S972
: HALF Switch

S975
: RECINH_F Switch

S6101
: POWER Switch

S6102
: SINGLE DISC CHANGE Switch

S6103
: OPEN/CLOSE Switch

S6104
: CD 1 Switch

S6105
: CD 2 Switch

S6106
: CD 3 Switch

S6107
: CD 4 Switch

S6108
: CD 5 Switch

S6201
: DECK 2 OPEN Switch

S6202
: DISPLAY/DEMO Switch

S6203
: DECK 1/2 Switch

S6204
: H.BASS Switch

S6205
: FF Switch

S6206

: REW Switch

S6207

: DECK 1 OPEN Switch

S6301

: CD Switch

S6302

: TAPE Switch

S6303

: STOP Switch

S6304

: REC Switch

S6305

: TUNER/BAND Switch

S6306

: MUSIC PORT Switch

S6308

: MULTI DISC CHANGE Switch

S7201

: REST Switch

VR6491

: VR VOLUME

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.

- Importance safety notice :

Components identified by mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

IC, LSI and VLSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.

- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

17.2. (A) CD Servo Circuit

17.3. (B) Main (Tuner) Circuit

17.4. (B) Main Circuit

17.5. (C) Panel Circuit

17.6. (D) Transformer Circuit

17.7. (H) Power Circuit

17.8. (F) Deck Circuit & (G) Deck Mechanism Circuit

18. Printed Circuit Board

Note: Circuit board diagrams may be modified at any time with the development of new technology.

18.1. (A) CD Servo P.C.B.

18.2. (B) Main P.C.B.

18.3. (C) Panel P.C.B.

18.4. (D) Transformer P.C.B.

18.5. (E) Power P.C.B.

18.6. (F) Deck P.C.B. & (G) Deck Mechanism P.C.B.

19. Illustration of ICs, Transistors and Diodes

20. Terminal Function of IC's

20.1. IC7001 (MN6627954MA) Servo Processor,Digital Signal Processor/ Digital filter and D/A Converter

Pin No.	Mark	I/O	Function
1	A11	O	DRAM address signal O/P 11
2	A9	O	DRAM address signal O/P 9
3	A8	O	DRAM address signal O/P 8
4	A7	O	DRAM address signal O/P 7
5	A6	O	DRAM address signal O/P 6
6	A5	O	DRAM address signal O/P 5
7	A4	O	DRAM address signal O/P 4
8	NWE	O	Write Enable Signal (DRAM)
9	NCAS	O	DRAM CAS Control Signal
10	NRAS	O	DRAM ARS Control Signal
11	A3	O	DRAM address Signal O/P 3
12	A2	O	DRAM address Signal O/P 2
13	A1	O	DRAM address Signal O/P 1
14	A0	O	DRAM address Signal O/P 0
15	A10	O	DRAM address Signal O/P 10
16	BA0	N.C.	Motor O/P (0);/Serial I/P
17	BA1	N.C.	Motor O/P (1);/Serial I/P
18	PRAMVSS33	-	GND (DRAM)
19	PRAMVDD15	-	Power Supply Voltage (DRAM)
20	PRAMVDD33	-	Power Supply Voltage (+1.6V)
21	SPOUT	O	Spindle Drive O/P
22	PC	I/O	Spindle motor drive O/P signal serial data/ Monitoring I/P
23	TRVP	O	Traverse Drive O/P (+ve)
24	TRP	O	Tracking Drive O/P (+ve)
25	FOP	O	Focusing Drive O/P (+ve)
26	DVSS1	-	GND

Pin No.	Mark	I/O	Function
27	IOVDD2	I	Digital Power Supply Voltage 2 (I/O)
28	DVDD1	-	Digital Power Supply Voltage 1 (Built-In)
29	SRVMON0	N.C.	Servo Monitor (0) O/P
30	SRVMON1	N.C.	Servo Monitor (1) O/P
31	AVSS2	-	GND
32	OSCIN	I	Oscillating Input
33	CTRCRS	N.C.	Tracking Cross Comparator
34	VREF	-	+Vref Supply Voltage
35	E	I	Tracking Input Signal 1
36	F	I	Tracking Input Signal 2
37	D	I	Focusing Input Signal 4
38	B	I	Focusing Input Signal 2
39	C	I	Focusing Input Signal 3
40	A	I	Focusing Input Signal 1
41	PD	I	APC Amp I/P
42	LD	O	Laser Drive Current O/P
43	CENV	I	Detection Capacitance Connection terminal
44	RFENV	O	RF Envelope O/P
45	RFOUT	O	RF Summing Amp O/P
46	RFIN	I	SGC I/P
47	AVDD2	I	Analog Power Supply voltage 2 (For DSL/PLL)
48	ARFDC	O	AGC Capacitive Connection Terminal
49	ARFOUT	O	AGC Output
50	ARFFB	I	ARF Feedback Signal I/P
51	ARFIN	I	Audio RF Signal I/P
52	DSLF	I	Loop Filter Terminal (For DSL)
53	IREF	I	Reference I/P
54	PLLF	I	PLL Loop Filter Terminal (Phase Compare)
55	PLLF0	O	PLL Loop Filter Terminal (Speed Compare)
56	OUTL	O	Audio O/P (LCH)
57	AVSS1	-	GND
58	AVDD1	I	Analog Power Supply Voltage 1
59	OUTR	O	Audio O/P (RCH)
60	DVSS3	-	GND3 (Digital Circuit)

Pin No.	Mark	I/O	Function
61	NSRVMONON	I	Servo Motor O/P Enabling
62	EXT0	N.C.	Expansion O/P Port 0
63	EXT1	N.C.	Expansion O/P Port 1
64	EXT2	N.C.	Expansion O/P Port 2
65	FLAG	N.C.	Flag Signal O/P
66	TX	N.C.	Digital Audio Interface O/P signal
67	MCLK	I	Micro-Computer Command Clock I/P
68	MDATA	I	Micro-Computer Data I/P
69	MLD	I	Micro-Computer Load I/P
70	STAT	O	Status Signal O/P
71	BLKCK	O	Subcode Blk Clock
72	NRST	O	LSI Reset Signal
73	DQSYTXT	N.C.	Pack Signal O/P for CD-Text data
74	SMCK	N.C.	Micro-Computer Clock O/P
75	PMCK	N.C.	IOCNT Serial data O/P (Synchronous O/P)
76	DVDD2	-	Digital Power Supply Voltage 2 (+1.5V)
77	IOVDD1	-	Digital Power Supply Voltage 1 (For I/O)
78	DVSS2	-	GND2 (For Digital Circuit)
79	NTEST2	I	Test Mode Setting (ON: H)
80	X2	O	Crystal Oscillating Circuit O/P
81	X1	I	Crystal Oscillating Circuit I/P
82	NTEST	I	Test Mode Setting I/P (ON:H)
83	D2	I/O	Data Signal O/P 2
84	D1	I/O	Data Signal O/P 1
85	D0	I/O	Data Signal O/P 0
86	D3	I/O	Data Signal O/P 3
87	D4	I/O	Data Signal O/P 4
88	D5	I/O	Data Signal O/P 5
89	D6	I/O	Data Signal O/P 6
90	D7	I/O	Data Signal O/P 7
91	D15	I/O	Data Signal O/P 15
92	D14	I/O	Data Signal O/P 14

Pin No.	Mark	I/O	Function
93	DRVDD	I	I/O Power Supply Voltage (DRAM)
94	D13	I/O	Data Signal O/P 13
95	D12	I/O	Data Signal O/P 12
96	D11	I/O	Data Signal O/P 11
97	D10	I/O	Data Signal O/P 10
98	D9	I/O	Data Signal O/P 9
99	D8	I/O	Data Signal O/P 8
100	SDRCK	O	Clock Signal O/P

20.2. IC7002 (BA5948FPE2) IC 4CH Drive

Pin No.	Mark	I/O	Function
1	IN2	I	Motor Driver 92 Input
2	PC2	I	Turntable Motor Drive Signal (“L”:ON)
3	IN1	I	Motor Drive (1) Input
4	PC1	-	Traverse Motor Drive Signal (“L”): ON)
5-8	N.C.	-	No Connection
9	PGND1	-	Ground Connection (1) for Drive
10	PVCC1	I	Power Supply (1) for Drive
11	D1-	O	Motor Drive (1) reverse - action output
12	D1+	O	Motor Drive (1) forward - action output
13	D2-	O	Motor Drive (2) reverse - action output
14	D2+	O	Motor Drive (2) forward - action output
15	D3-	O	Motor Drive (3) reverse - action output
16	D3+	O	Motor Drive (3) forward - action output
17	D4-	O	Motor Drive (4) reverse - action output
18	D4+	O	Motor Drive (4) forward - action output
19	PVCC2	-	Power Supply (2) for Driver

Pin No.	Mark	I/O	Function
20	PGND2	-	Ground Connection (2) for Driver
21-24	N.C.	O	No Connection
25	VCC	I	Power Supply terminal
26	VREF	I	Reference Voltage Input
27	IN4	I	Motor Driver (4) Input
28	IN3	I	Motor Driver (3) Input

20.3. IC2801 (C2CBYY000053) System Microprocessor

Pin No.	Mark	I/O	Function
1	LM_1	-	Level Meter
2	PA_LVL	-	No Connection
3	PLLCE	O	PLL Chip Select
4	RDS_DA	I	RDS Data Input
5	RDS_CLK	I	RDS Clock Input
6	MODE_A	-	No Connection
7	F_Hop	O	F_Hop for Digital Amp
8	BYTE	-	External Data Bus Width Select Input (Connect to Ground)
9	CNVSS	-	Flash Mode Terminal (Connect to Ground)
10	XC_IN	-	32.768 kHz Sub Clock
11	XC_OUT	-	32.768 kHz Sub Clock
12	/RESET	-	Reset Input (ACTIVE L)
13	X_OUT	-	10 MHz Main Clock
14	VSS	-	Ground (0V)
15	XIN	-	10 MHz Main Clock
16	VCC	-	Power Supply (+5V)
17	/NMI	-	Connect to Vcc (+5V)
18	RMT	I	Remote Control Input
19	BLKCK	I	CD Block Clock Input (Inverted)
20	SYNC	I	AC Failure Detect Input
21	ST/DO	I	Tuner IF Data/ Stereo Input
22	SD	I	Tuner Signal Detect Input
23	N.C.	-	No Connection
24	SW_LV-1	O	Sub-Woofer Level 1
25	SW_LV-2	O	Sub-Woofer Level 2
26	ASP_DA	O	ASP DATA
27	ASP_CLK	O	ASP CLOCK

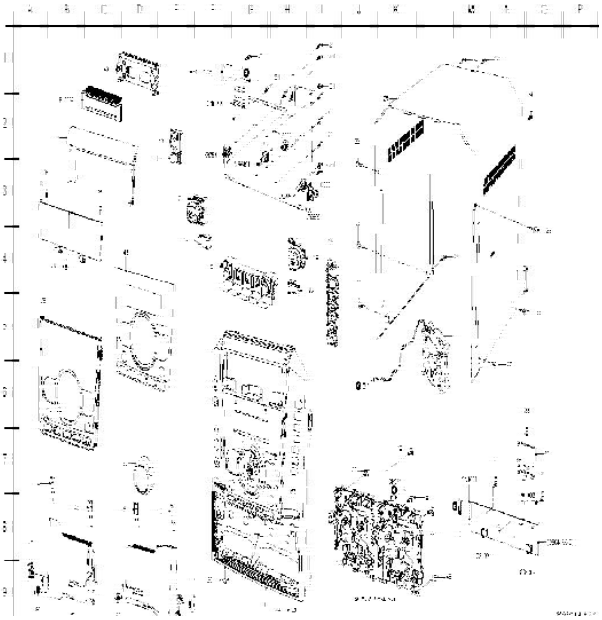
Pin No.	Mark	I/O	Function
28	10DB_ATT	O	No Connection
29	PLL_DAT	O	PLL DATA
30	PLL_CLK	O	PLLCLK
31	REG8	-	To GND resistor
32	REG7	I	Region Setting 7 (MIC)/ Flash Rx
33	REG6	I	Region Setting 6 (RDS)/ Flash Clock
34	REG5	O	Chip Select/Flash Busy
35	REG4	I	Latin Non Chip Select
36	REG3	I	Region Setting 3 (Tuner)
37	REG2	I	Region Setting 2 (Tuner)
38	REG1	I	Region Setting 1 (Tuner)
39	MUTE_DA	O	Mute_DA for Digital Amp
40	MUTE_A	O	Audio Mute
41	EE_CS/EFP/ EPH	O	EEPROM Chip Select
42	EE_CLK	O	EEPROM CLOCK
43	EE_DAT	I/O	EEPROM DATA
44	N.C.	-	No Connection
45	N.C.	-	No Connection
46	PCONT/EFP/ CS	O	Main Transformer Control Output
47	DCDET	I	DC Detect Input
48-49	N.C.	-	No Connection
50	STANDBY	O	Standby mode
51	N.C.	-	No Connection
52	HALF_1	I	Deck 1 HALF PLAYBACK INPUT
53	MODE_1	I	Deck 1 MODE PLYABACK INPUT
54	N.C.	-	No Connection
55	N.C.	-	No Connection
56	PLG1	O	Deck 1 plunger control
57	PLG2	O	Deck 2 plunger control
58	MTR	O/I	Deck motor control (“L” for motor ON)
59	REC	O/I	L when record circuit is operating
60	DECK1_H	O	H when DECK 1 P/B head is selected
61	N.C.	-	No Connection
62	VCC	-	Power Supply (+5V)
63	N.C.	-	No Connection
64	VSS	-	Ground (0V)

Pin No.	Mark	I/O	Function
65	SW_LED	O	SUB WOOFER LED
66	VOL_LED	O	VOLUME_LED
67	V_JOG_A	I	Volume Jog A
68	V_JOG_B	I	Volume Jog B
69	FL_RESET	O	FL Driver reset
70	FL_CS	I/O	FL Driver Chip Select
71	FL_DOUT	O	Serial Data To FL Driver
72	FL_CLK	I/O	Serial Clock To FL Driver
73	H.BASS_LED	O	H.BASS LED
74	CD_RST	O	CD Reset Output
75	STATUS	I	CD Servo LSI Status Input
76	MLD	O	CD Command Load Output
77	MDATA	O	CD Command Data Output
78	MCLK	O	CD Command Clock Output
79	/RESTSW	I	CD Limit Switch Input for the most Inner Point (Active Low)
80	HOME_SW	I	Home Switch for CRS1
81	SPEED	O	SPEED is For CRS1 (cater)
82	CLOSE_SW	I	CLOSE SW is for CRS1
83	OPEN_SW	I	Open_Sw for CRS1
84	CHG_CW	O	CRS1 motor CW
85	CHG_CCW	O	CRS1 motor CCW
86	ST_SW	I	Stock_Sw for CRS1
87	PLAY_SW	I	Play_Sw for CRS1
88	CHG_PLR	O	Plunger for CRS1
89	BOTTOM_SW	I	Bottom_SW for CRS1
90	UP_SENSOR	I	UD-Sensor for CRS1
91	DECK2	I	DECK CONDITION INPUT 2 (R_INHF/MODE2/HALF2)
92	KEY3	I	KEY3 INPUT
93	KEY2	I	KEY2 INPUT
94	KEY1	I	KEY1 INPUT
95	PHOTO_2	I	Rotation Detection Signal (Deck 2)
96	AVSS	-	Analog Power Supply Input (Connect to GND)
97	PHOTO_1	I	Rotation Detection Signal (Deck 1)

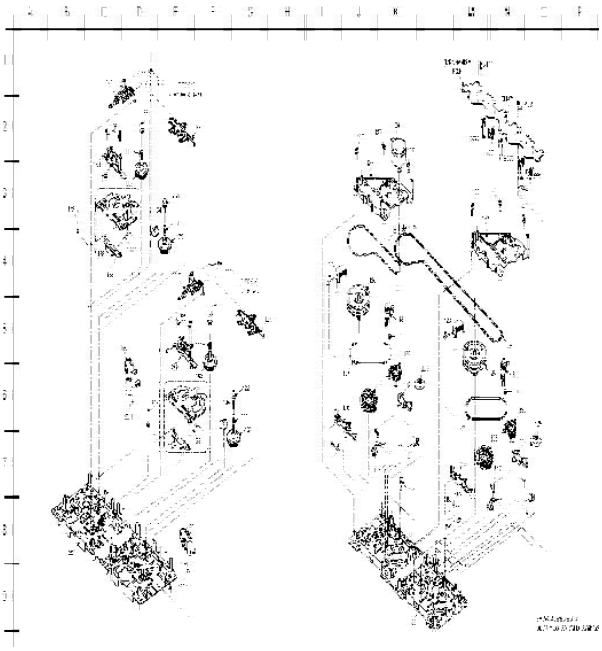
Pin No.	Mark	I/O	Function
98	VREF	-	Reference for A-D (5V)
99	AVCC	-	Analog Power Supply Input
100	DEMO	I	(H= default demo on, L= default demo off.)

21. Exploded Views

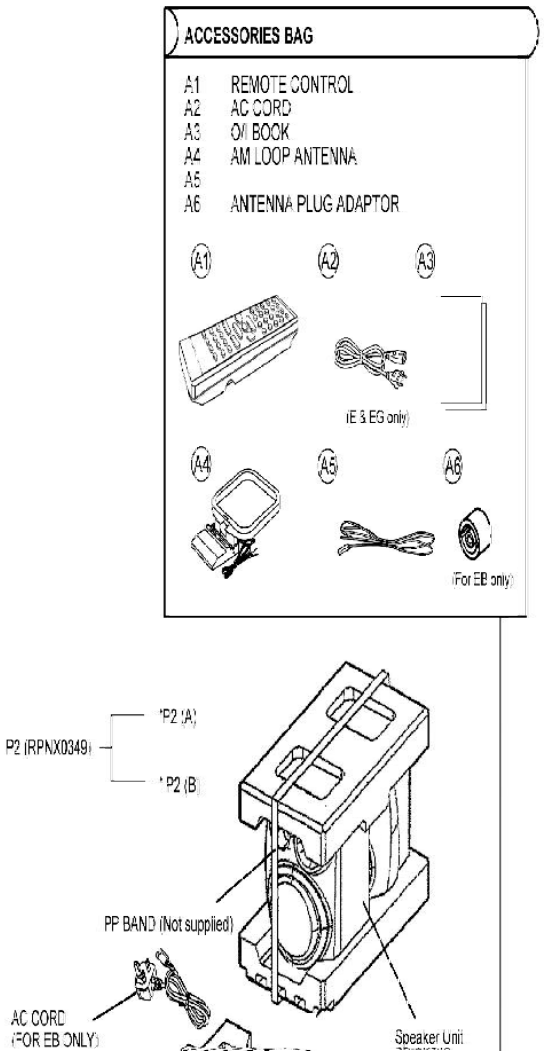
21.1. Cabinet Parts Location



21.2. Deck Mechanism Parts Location (RAA4502-S)



21.3. Packaging



22. Replacement Parts List

Notes:

- Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.
When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)
Parts without these indications can be used for all areas.

- Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".
ACHTUNG:

- Die Lasereinheit nicht zerlegen.

- Die Lasereinheit darf nur gegen eine vom Hertsteller spezifizierte Einheit ausgetauscht werden.

- Capacitor values are in microfarads (μ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.

- Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM).

- The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

- [M] Indicates in the Remarks columns indicates parts supplied by PAVCSG.

- Reference for O/I book languages are as follows:

Ar:	Arabic	Du:	Dutch	It:	Italian	Sp	Spanish
Cf:	Canadian French	En:	English	Ko:	Korean	Sw:	Swedish
Cz:	Czech	Fr:	French	Po:	Polish	Co:	Traditional Chinese
Da:	Danish	Ge:	German	Ru:	Russian	Cn:	Simplified Chinese
Pe:	Persian						

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	L6FALEFH0030	FAN UNIT	[M]
2	REEX0212-2	14P FFC WIRE	[M]
3	REEX0503	10P FFC WIRE	[M]
4	REEX0513	17P FFC WIRE	[M]
5	REEX0528	14P FFC WIRE	[M]
6	REEX0529	30P FFC WIRE	[M]
7	RGKX0319-KJ	TOP ORNAMENT	[M]
8	RGKX0320D-KJ	CD LID	[M]
10	RGLX0121-Q	POWER LIGHT PIECE	[M]
11	RGPX0207C-S1	FRONT PANEL	[M]
12	RGRX0054F-A	REAR PANEL	[M]E
12	RGRX0054F-B	REAR PANEL	[M]EB
12	RGRX0054F-C	REAR PANEL	[M]EG
13	RGUX0637-SJ	POWER/DISC BUTTON	[M]
14	RGUX0638-SJ	OPEN DECK 1 BUTTON	[M]
15	RGUX0639-SJ	OPEN DECK 2 BUTTON	[M]
16	RGUX0640-SJ	DISC/OPEN/5CD BUTTON	[M]
17	RGUX0642-SJ	FUNCTION BUTTON L	[M]
18	RGUX0643-SJ	FUNCTION BUTTON R	[M]
19	RGUX0644-KJ	CONTROL BUTTON	[M]
20	RGWX0094-S	VOLUME KNOB	[M]
21	RHD26046-L	SCREW	[M]
22	RHD30007-1SJ	SCREW	[M]
23	RHD30111-3	SCREW	[M]
24	RHD30119-S	SCREW	[M]
25	RKA0072-KJ	LEG CUSHION	[M]
26	RKFX0131-SJ	CASS LID L	[M]
27	RKFX0132-SJ	CASS LID R	[M]
28	RKMX0117-SJ	TOP PANEL (BEND)	[M]
29	RKWX0253-H	FL WINDOW	[M]
30	RMBX0036	CASS OPEN SPRING	[M]
31	RMBX0049	CD LID OPEN SPRING	[M]
33	RMCX0021-J	TRANSISTOR CLIP	[M]
34	RMG0547-K	CUSHION	[M]
35	XTWS3+6TFJ	SCREW	[M]
36	RMGX0044	D.AMP.IC INSULATOR	[M]
37	RMKX0112	BOTTOM CHASSIS	[M]
38	RMKX0113	CD CHASSIS	[M]
40	RMNX0163	FL HOLDER	[M]
42	XTW3+10TFC	SCREW	[M]
43	RMVX0092A	FL WINDOW BACKGROUND	[M]
45	RUS757ZAA	CASS HALF SPRING	[M]
46	XTV3+10GFJ-M	SCREW	[M]
47	RXGX0002	DAMPER GEAR	[M]
48	RXXX0066A	HEAT SINK UNIT	[M]
49	XTW3+12TFJ	SCREW	[M]
51	RSQX0006	D/SHIELD PLATE UNIT	[M]
		CASSETTE DECK	
101	RED0069-2	R/P HEAD BLOCK UNIT	[M]
102	RED0070-1	P/B HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026-4	MAIN GEAR	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064-1	CAPSTAN BELT	[M]
109	RDV0071-2	CAPSTAN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAD PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406-5	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370-4	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372-2	WINDING LEVER	[M]
119	RML0374-2	EJECT LEVER	[M]
120	RMM0131-1	BRAKE ROD	[M]
121	RMM0133-1	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS'Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0061-1	FLYWHEEL F ASS'Y	[M]
128	RXG0040	FF RELAY GEAR ASS'Y	[M]
129	RMK0283A-2	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS'Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASS'Y	[M]
133	RXQ0412-3	HEAD PANEL ASS'Y	[M]
133-1	RMB0405-1	FR ROD SPRING	[M]
133-2	RMM0132-1	FR ROD	[M]
134	REM0121	CAP MOTOR ASS'Y	[M]
135	RHD26022-1	MOTOR SCREW	[M]
136	XTW2+5LFJ	HEAD BLOCK UNIT SCREW	[M]
137	XTW26+10SFJ	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17FJ	PCB EARTH SCREW	[M]
139	RFKJAA4501-S	CHASSIS ASS'Y	[M]
		TRAVERSE DECK	
358	RFKNCT121157	SPINDLE MOTOR ASS'Y	[M]
358-1	RXQ0632	TRAVERSE MOTOR UNIT	[M]
358-2	XQN17+C28FJ	SCREW	[M]
359	RDG0455	TRAVERSE GEAR (A)	[M]
360	RDG0456	TRAVERSE GEAR (B)	[M]
361	RXQ0999	OPU UNIT	[M]
362	RMM0218	TRAVERSE DRIVE RACK	[M]
363	SNSD38-1	SCREW	[M]
364	RMS0757-1	FIXED PIN	[M]
365	RMG0703-R	FLOATING RUBBER	[M]
366	RME0109	FLOATING SPRING	[M]
367	XTN2+6GFJ	SCREW	[M]
368	RMRX0064	MIDDLE CHASSIS	[M]
369	RAE0157A-V	TRV UNIT WITHOUT SERVO	[M]
		PRINTED CIRCUIT BOARD	
	REPX0494A	CD SERVO P.C.B.	[M]
	REPX0516N	MAIN P.C.B.	[M]
	REPX0517N	PANEL P.C.B.	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
	REPX0518K	TRANSFORMER P.C.B.	[M]
	REPX0533B	POWER P.C.B.	[M]
	REPX0331G	DECK P.C.B.	[M]
	REPX0321A	DECK MECHANISM P.C.B.	[M]
		INTEGRATED CIRCUITS	
IC951	CNB13030R2AU	IC PHOTO INTERRUPTER	[M]
IC971	CNB13030R2AU	IC PHOTO INTERRUPTER	[M]
IC1001	AN7348S-E1	IC P.B. EQ/REC AMP/ALC/TPS AMP	[M]
IC1004	C1AA00000612	IC R.P. SELECT	[M]
IC2601	C1BB00000962	IC FM/AM IF AMP,DET/AM OSC,MIX/FM MPX	[M]
IC2602	C1CB00001937	IC PLL FREQUENCY SYNTHESIZER	[M]
IC2801	C2CBYY000053	IC MICROPROCESSOR	[M]
IC2803	C1BB00001121	IC AUDIO SOUND PROCESSOR	[M]
IC2804	C0AABB000125	IC DUAL OP-AMP	[M]
IC2809	C1BB00000987	IC RDS	[M]
IC5201	C0JBAB000011	IC LOGIC	[M]
IC5301	C1BA00000407	IC 2-CH DIGITAL AMP	[M]
IC6601	C0HBB0000057	IC FL DRIVER	[M]
IC7001	MN6627954MA	IC SERVO PROCESSOR/DIGITAL SIGNAL PROCESSOR/DIGITAL / FILTER D/A CONVERTER	[M]
IC7002	BA5948FPE2	IC 4 CH DRIVE	[M]
		TRANSISTORS	
Q1003	B1AAGC000007	TRANSISTOR	[M]
Q1004	B1AAGC000007	TRANSISTOR	[M]
Q1005	B1AAGC000007	TRANSISTOR	[M]
Q1007	B1ABCF000176	TRANSISTOR	[M]
Q1017	B1AARC000003	TRANSISTOR	[M]
Q2142	B1ABCF000176	TRANSISTOR	[M]
Q2242	B1ABCF000176	TRANSISTOR	[M]
Q2311	B1ABGC000005	TRANSISTOR	[M]
Q2317	B1ABGC000005	TRANSISTOR	[M]
Q2341	B1ABGC000005	TRANSISTOR	[M]
Q2411	B1ABGC000005	TRANSISTOR	[M]
Q2417	B1ABGC000005	TRANSISTOR	[M]
Q2441	B1ABGC000005	TRANSISTOR	[M]
Q2511	B1GDCFJJ0047	TRANSISTOR	[M]
Q2601	B1AABC000003	TRANSISTOR	[M]
Q2606	B1GCCFJJ0016	TRANSISTOR	[M]
Q2610	2SC3311ARA	TRANSISTOR	[M]
Q2803	B1GBCFJJ0051	TRANSISTOR	[M]
Q2901	B1ACKD000006	TRANSISTOR	[M]
Q2902	B1AACF000064	TRANSISTOR	[M]
Q2906	B1ABCF000176	TRANSISTOR	[M]
Q2907	B1ABCF000176	TRANSISTOR	[M]
Q2936	B1ACKD000006	TRANSISTOR	[M]
Q2937	B1GBCFJJ0051	TRANSISTOR	[M]
Q2942	B1ACKD000006	TRANSISTOR	[M]
Q2943	B1ABCF000176	TRANSISTOR	[M]
Q2948	B1ABCF000176	TRANSISTOR	[M]
Q2949	B1ABCF000176	TRANSISTOR	[M]
Q2950	B1ACKD000006	TRANSISTOR	[M]
Q2951	B1ACKD000006	TRANSISTOR	[M]
Q2952	B1GBCFLL0037	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q2957	B1GBCFLL0037	TRANSISTOR	[M]
Q2958	B1ACKD000006	TRANSISTOR	[M]
Q2959	B1GBCFLL0037	TRANSISTOR	[M]
Q2960	B1ACKD000006	TRANSISTOR	[M]
Q2978	B1GDCFJJ0047	TRANSISTOR	[M]
Q2980	B1GDCFJJ0047	TRANSISTOR	[M]
Q5101	B1CEGM000001	TRANSISTOR	[M]
Q5102	B1CEGM000001	TRANSISTOR	[M]
Q5103	B1ABCF000176	TRANSISTOR	[M]
Q5104	B1ABCF000176	TRANSISTOR	[M]
Q5108	B1ABCF000176	TRANSISTOR	[M]
Q5109	2SB0709AHL	TRANSISTOR	[M]
Q5110	B1AACF000064	TRANSISTOR	[M]
Q5111	B1BACG000023	TRANSISTOR	[M]
Q5112	B1BCCG000002	TRANSISTOR	[M]
Q5113	B1GDCFNA0001	TRANSISTOR	[M]
Q5114	B1ABCF000176	TRANSISTOR	[M]
Q5115	B1AAKD000014	TRANSISTOR	[M]
Q5153	B1ABCF000176	TRANSISTOR	[M]
Q5154	2SB0709AHL	TRANSISTOR	[M]
Q5173	B1ABCF000176	TRANSISTOR	[M]
Q5201	B1ABCF000176	TRANSISTOR	[M]
Q5202	B1ADCF000063	TRANSISTOR	[M]
Q5950	B1AAKD000014	TRANSISTOR	[M]
Q5951	2SB0621AHA	TRANSISTOR	[M]
Q5952	B1GACFJJ0018	TRANSISTOR	[M]
Q5953	B1AACF000064	TRANSISTOR	[M]
Q7601	B1ADCF000001	TRANSISTOR	[M]
		DIODES	
D951	MA2C16500E	DIODE	[M]
D971	MA2C16500E	DIODE	[M]
D1003	B0ACCK000005	DIODE	[M]
D2191	B0ACCK000005	DIODE	[M]
D2241	B0ACCK000005	DIODE	[M]
D2583	B0BC9R000008	DIODE	[M]
D2601	B0BC5R000009	DIODE	[M]
D2602	B0CDBB000015	DIODE	[M]
D2677	B0BC7R500001	DIODE	[M]
D2801	B0ACCK000005	DIODE	[M]
D2803	B0ACCK000005	DIODE	[M]
D2811	B0ADCJ000020	DIODE	[M]
D2813	B0ACCK000005	DIODE	[M]
D2901	B0ADCC000002	DIODE	[M]
D2936	B0EAKM000117	DIODE	[M]
D2946	B0ADCJ000020	DIODE	[M]
D2950	B0ACCK000005	DIODE	[M]
D5101	B0BA01100004	DIODE	[M]
D5102	B0BA02600018	DIODE	[M]
D5103	B0BA3R900006	DIODE	[M]
D5104	B0BA01100004	DIODE	[M]
D5105	B0BA02400029	DIODE	[M]
D5107	B0BA01500003	DIODE	[M]
D5108	B0BA5R700008	DIODE	[M]
D5109	B0BA01100004	DIODE	[M]
D5121	B0EAKM000122	DIODE	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
D5122	B0EAKM000122	DIODE	[M]
D5123	B0EAKM000122	DIODE	[M]
D5124	B0EAKM000122	DIODE	[M]
D5125	B0AACK000004	DIODE	[M]
D5126	B0ACCK000005	DIODE	[M]
D5128	B0EAKM000122	DIODE	[M]
D5129	B0EAKM000122	DIODE	[M]
D5152	B0BA01900005	DIODE	[M]
D5950	B0EAMM000038	DIODE	[M]
D5951	B0EAMM000038	DIODE	[M]
D5952	B0EAMM000038	DIODE	[M]
D5953	B0EAMM000038	DIODE	[M]
D5954	B0EAKM000122	DIODE	[M]
D5955	B0EAKM000122	DIODE	[M]
D5956	B0EAKM000122	DIODE	[M]
D5957	B0EAKM000122	DIODE	[M]
D5958	B0EAKM000122	DIODE	[M]
D5959	B0EAKM000122	DIODE	[M]
D5960	B0BA02400030	DIODE	[M]
D5961	B0AACK000004	DIODE	[M]
D5962	B0AACK000004	DIODE	[M]
D5963	B0AACK000004	DIODE	[M]
D5964	B0BA6R800008	DIODE	[M]
D5965	B0AACK000004	DIODE	[M]
D5966	B0AACK000004	DIODE	[M]
D5986	B0AACK000004	DIODE	[M]
D5987	B0AACK000004	DIODE	[M]
D6458	B3AAA0000583	DIODE	[M]
D6635	B0BC5R600003	DIODE	[M]
D7650	MAZ80560ML	DIODE	[M]
		VARIABLE RESISTORS	
VR6491	EVEKE2F3524B	VR VOLUME JOG	[M]
		SWITCHES	
S951	K0J1BB000017	SW MODE	[M]
S952	K0J1BB000021	SW HALF	[M]
S971	K0J1BB000017	SW MODE	[M]
S972	K0J1BB000021	SW HALF	[M]
S975	K0J1BB000021	SW RECINH_F	[M]
S6101	EVQ21405RJ	SW POWER	[M]
S6102	EVQ21405RJ	SW SINGLE DISC CHANGE	[M]
S6103	EVQ21405RJ	SW OPEN/CLOSE	[M]
S6104	EVQ21405RJ	SW CD 1	[M]
S6105	EVQ21405RJ	SW CD 2	[M]
S6106	EVQ21405RJ	SW CD 3	[M]
S6107	EVQ21405RJ	SW CD 4	[M]
S6108	EVQ21405RJ	SW CD 5	[M]
S6201	EVQ21405RJ	SW DECK 2 OPEN	[M]
S6202	EVQ21405RJ	SW DISPLAY/DEMO	[M]
S6203	EVQ21405RJ	SW DECK 1/2	[M]
S6204	EVQ21405RJ	SW H.BASS	[M]
S6205	EVQ21405RJ	SW FF	[M]
S6206	EVQ21405RJ	SW REW	[M]
S6207	EVQ21405RJ	SW DECK 1 OPEN	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S6301	EVQ21405RJ	SW CD	[M]
S6302	EVQ21405RJ	SW TAPE	[M]
S6303	EVQ21405RJ	SW STOP	[M]
S6304	EVQ21405RJ	SW REC	[M]
S6305	EVQ21405RJ	SW TUNER/BAND	[M]
S6306	EVQ21405RJ	SW MUSIC PORT	[M]
S6308	EVQ21405RJ	SW MULTI DISC CHANGE	[M]
S7201	RSH1A048-A	SW RESET	[M]
		CONNECTORS	
CN971	K1MN10B00104	10P FFC CONNECTOR	[M]
CN1001	K1MN14B00058	14P FFC CONNECTOR	[M]
CN2801	K1MN17AA0004	17P CONNECTOR	[M]
CN2803	K1MN14A00049	14P FFC CONNECTOR	[M]
CN2805	K1MN14A00049	14P FFC CONNECTOR	[M]
CN2806	K1MN30AA0004	30P CONNECTOR	[M]
CN2808	K1KB12B00036	12P CONNECTOR	[M]
CN2809	K1KB12B00036	12P CONNECTOR	[M]
CN2810	K1KA02AA0186	2P FAN CONNECTOR	[M]
CN2951	K1MN10AA0003	10P FFC CONNECTOR	[M]
CN5102	K1KA12AA0424	12P CONNECTOR	[M]
CN5103	K1KA12AA0424	12P CONNECTOR	[M]
CN5950	K1KA09AA0319	9P CONNECTOR	[M]
CN5951	K1KA09AA0193	9P CONNECTOR	[M]
CN6601	K1MN30AA0004	30P CONNECTOR	[M]
CN7001	K1MN16B00154	16P CONNECTOR	[M]
CN7002	K1MN17B00032	17P CONNECTOR	[M]
CS1001	K1MY05AA0043	5P CONNECTOR	[M]
CS1002	K1MN05A00039	5P CONNECTOR	[M]
		COILS & TRANSFORMERS	
L1001	G0C470JA0052	RF CHOKE COIL	[M]
L1002	G2ZZ00000024	BIAS OCS COIL	[M]
L2601	G2A411C00001	AM COIL	[M]
L2602	G2BPC0000016	OSCILLATOR COIL	[M]
L2961	G0C101JA0052	INDUCTOR	[M]
L2962	G0C101JA0052	INDUCTOR	[M]
L5101	J0JKB0000037	FILTER	[M]
L5102	J0JKB0000037	FILTER	[M]
L5301	G0C220Z00002	COIL	[M]
L5601	G0B9R5K00001	COIL	[M]
L5602	G0B9R5K00001	COIL	[M]
L5950	ELF15N035AN	LINE FILTER	[M]
T5950	G4CYAYY00058	TRANSFORMER	[M]
T5951	RTP1H3E002	BACK-UP TRANSFORMER	[M]
		COMPONENT COMBINATIONS	
Z971	RGSD12A1445T	RADA RESISTOR	[M]
Z2602	G2BAD0000003	AM IFT	[M]
Z2620	ENV17290G1Y	FM TUNER PACK	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Z5950	ERZV10V511CS	ZENER	[M]
Z6481	B3RAB0000025	REMOTE SENSOR	[M]
		CERAMIC FILTERS	
CF2601	J0B1075AA006	CERAMIC CAPACITOR	[M]
CF2602	J0B1075AA006	CERAMIC CAPACITOR	[M]
		RELAY	
RL5950	K6B1AEA00015	POWER RELAY	[M]
		OSCILLATORS	
X2602	H3F1065A0002	DIELECTRIC RESONATOR	[M]
X2603	H0H720400007	CRYSTAL	[M]
X2801	H0A327200115	CRYSTAL	[M]
X2802	H2B100500004	CERAMIC RESONATOR	[M]
X2803	H0H433400002	CRYSTAL	[M]
X5201	H2A415300001	OSCILLATOR	[M]
X5202	H2A375300003	OSCILLATOR	[M]
X7201	H2B169500005	CRYSTAL	[M]
		DISPLAY TUBE	
FL6602	A2BD00000141	FL	[M]
		FUSE	
F1	K5D162BLA013	FUSE	[M]
		FUSE HOLDERS	
FC1	EYF52BCY	FUSE CLIP	[M]
FC2	EYF52BCY	FUSE CLIP	[M]
		FUSE PROTECTORS	
FP5920	K5G702A00009	FUSE	[M]
FP5940	K5G702Z00004	FUSE PROTECTOR	[M]
FP5950	K5G402A00025	FUSE PROTECTOR	[M]
		HOLDERS	
H5104	K1YF09000001	9P WIRE HOLDER	[M]
H6555	K1YZ09000002	9P CABLE HOLDER	[M]
		JACKS	
JK2601	K4BC03A00008	JK ANTENNA	[M]
JK5101	K4AC04B00014	JK TERMINALS	[M]
JK5950	K2AA2B000011	JK AC INLET	[M]
JK6551	K2HC103A0024	JK HP	[M]
JK6751	K2HC1YYA0002	JK MUSIC PORT	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
		EARTH TERMINALS	
E5101	K4CZ01000027	EARTH LUG	[M]
E5102	K4CZ01000027	EARTH LUG	[M]
E5103	K4CZ01000027	EARTH LUG	[M]
		WIRES	
W1002	RWJ0102050CK	MAIN TO MECHA MOTOR	[M]
W5104	REXX0325	9P FLAT WIRE	[M]
W6555	REXX0324	9P FLAT WIRE	[M]
		PACKING MATERIALS	
P1	RPGX1522	PACKING CASE	[M]EG
P1	RPGX1523	PACKING CASE	[M]E
P1	RPGX1524	PACKING CASE	[M]EB
P2	RPNX0349	POLYFOAM UNIT	[M]
P3	RPFX0007-1	MIRAMAT BAG	[M]
		ACCESSORIES	
A1	N2QAHB000065	REMOTE CONTROL	[M]
A1-1	RKK-HTR0283H	R/C BATTERY COVER	[M]
A2	K2CQ2CA00006	AC CORD	[M]EG/E
A2	K2CT3CA00004	AC CORD	[M]EB
A3	RQTV0063-1E	O/I BOOK (Sp/Po/Cz)	[M]E
A3	RQTV0064-1D	O/I BOOK (Ge/It/Fr)	[M]EG
A3	RQTV0065-1H	O/I BOOK (Du/Da/Sw)	[M]EG
A3	RQTV0066-1B	O/I BOOK (En)	[M]EB/E
A4	N1DAAAA00001	AM LOOP ANTENNA	[M]
A5	RSA0007-L	FM ANTENNA WIRE	[M]
A6	K1YZ02000013	ANT ADAPTER	[M]EB
		RESISTORS	
R952	ERDS2TJ821T	820 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R1002	ERJ3GEY0R00V	0 1/16W	[M]
R1003	ERJ3GEYJ103V	10K 1/16W	[M]
R1004	D0GB152JA007	1.5K 1/16W	[M]
R1005	D0GB472JA041	4.7K 1/16W	[M]
R1007	ERD25FVJ4R7T	4.7 1/4W	[M]
R1009	D0GB183JA007	18K 1/16W	[M]
R1010	D0GB183JA007	18K 1/16W	[M]
R1011	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1012	D0GB472JA041	4.7K 1/16W	[M]
R1013	D0GB472JA041	4.7K 1/16W	[M]
R1014	D0GB472JA041	4.7K 1/16W	[M]
R1015	D0GB470JA008	47 1/16W	[M]
R1016	D0GB470JA008	47 1/16W	[M]
R1017	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1018	D0GB392JA007	3.9K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1019	D0GB392JA007	3.9K 1/16W	[M]
R1020	ERJ3GEY0R00V	0 1/16W	[M]
R1022	ERJ3GEYJ103V	10K 1/16W	[M]
R1024	ERJ3GEY0R00V	0 1/16W	[M]
R1025	ERJ3GEY0R00V	0 1/16W	[M]
R1026	ERJ3GEYJ102V	1K 1/16W	[M]
R1027	ERJ3GEY0R00V	0 1/16W	[M]
R1028	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1029	D0GB475JA007	4.7M 1/16W	[M]
R1030	D0GB101JA007	100 1/16W	[M]
R1031	D0GB273JA007	27K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1035	ERJ3GEYJ103V	10K 1/16W	[M]
R1040	ERJ3GEY0R00V	0 1/16W	[M]
R1049	ERJ3GEY0R00V	0 1/16W	[M]
R1050	ERJ3GEY0R00V	0 1/16W	[M]
R1055	D0GB222JA041	2.2K 1/16W	[M]
R1057	D0GB222JA041	2.2K 1/16W	[M]
R1060	D0GB391JA041	390 1/16W	[M]
R1084	D0GB222JA041	2.2K 1/16W	[M]
R1085	D0GB473JA041	47K 1/16W	[M]
R1086	D0GB222JA041	2.2K 1/16W	[M]
R1087	D0GB473JA041	47K 1/16W	[M]
R1090	D0GB221JA041	220 1/16W	[M]
R1091	J0JCC0000120	CHIP INDUCTOR	[M]
R1092	J0JCC0000120	CHIP INDUCTOR	[M]
R1097	ERJ3GEYJ103V	10K 1/16W	[M]
R1098	ERJ3GEYJ103V	10K 1/16W	[M]
R1099	ERJ3GEY0R00V	0 1/16W	[M]
R1100	ERJ3GEY0R00V	0 1/16W	[M]
R1101	ERJ3GEY0R00V	0 1/16W	[M]
R1102	ERJ3GEYJ103V	10K 1/16W	[M]
R2102	D0GB332JA007	3.3K 1/16W	[M]
R2104	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2111	D0GB222JA041	2.2K 1/16W	[M]
R2112	D0GB332JA007	3.3K 1/16W	[M]
R2121	D0GB332JA007	3.3K 1/16W	[M]
R2122	D0GB332JA007	3.3K 1/16W	[M]
R2131	D0GB332JA007	3.3K 1/16W	[M]
R2132	D0GB332JA007	3.3K 1/16W	[M]
R2145	ERJ3GEYJ102V	1K 1/16W	[M]
R2146	ERJ3GEYJ102V	1K 1/16W	[M]
R2151	ERJ3GEY0R00V	0 1/16W	[M]
R2172	D0GB223JA041	22K 1/16W	[M]
R2173	D0GB472JA041	4.7K 1/16W	[M]
R2181	D0GB471JA041	470 1/16W	[M]
R2182	ERJ3GEY0R00V	0 1/16W	[M]
R2183	ERJ3GEYJ102V	1K 1/16W	[M]
R2193	D0GB472JA041	4.7K 1/16W	[M]
R2194	D0GB104JA007	100K 1/16W	[M]
R2195	ERJ3GEYJ103V	10K 1/16W	[M]
R2196	ERJ3GEYJ103V	10K 1/16W	[M]
R2202	D0GB332JA007	3.3K 1/16W	[M]
R2204	ERJ3GEYJ392V	3.9K 1/16W	[M]
R2211	D0GB222JA041	2.2K 1/16W	[M]
R2212	D0GB332JA007	3.3K 1/16W	[M]
R2221	D0GB332JA007	3.3K 1/16W	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
R2222	D0GB332JA007	3.3K 1/16W	[M]
R2231	D0GB332JA007	3.3K 1/16W	[M]
R2232	D0GB332JA007	3.3K 1/16W	[M]
R2245	ERJ3GEYJ102V	1K 1/16W	[M]
R2246	ERJ3GEYJ102V	1K 1/16W	[M]
R2247	D0GB104JA007	100K 1/16W	[M]
R2248	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2251	ERJ3GEY0R00V	0 1/16W	[M]
R2271	D0GB153JA007	15K 1/16W	[M]
R2273	D0GB472JA041	4.7K 1/16W	[M]
R2281	D0GB471JA041	470 1/16W	[M]
R2282	ERJ3GEY0R00V	0 1/16W	[M]
R2283	ERJ3GEYJ104V	100K 1/16W	[M]
R2301	D0GB153JA007	15K 1/16W	[M]
R2311	D0GB471JA041	470 1/16W	[M]
R2312	ERJ3GEYJ103V	10K 1/16W	[M]
R2313	D0GB104JA007	100K 1/16W	[M]
R2314	ERJ3GEY0R00V	0 1/16W	[M]
R2315	ERJ3GEYJ563V	56K 1/16W	[M]
R2316	D0GB222JA041	2.2K 1/16W	[M]
R2317	ERJ3GEYJ103V	10K 1/16W	[M]
R2318	D0GB104JA007	100K 1/16W	[M]
R2321	ERJ3GEY0R00V	0 1/16W	[M]
R2326	ERJ3GEY0R00V	0 1/16W	[M]
R2328	D0GB153JA007	15K 1/16W	[M]
R2329	ERJ3GEYJ103V	10K 1/16W	[M]
R2330	D0GB392JA007	3.9K 1/16W	[M]
R2341	D0GB270JA007	27 1/16W	[M]
R2342	D0GB330JA007	33 1/16W	[M]
R2343	D0GB270JA007	27 1/16W	[M]
R2344	D0GB330JA007	33 1/16W	[M]
R2345	D0GB152JA007	1.5K 1/16W	[M]
R2346	D0GB332JA007	3.3K 1/16W	[M]
R2347	D0GB1R0JA007	1 1/16W	[M]
R2351	D0GB330JA007	33 1/16W	[M]
R2352	D0GB270JA007	27 1/16W	[M]
R2353	D0GB330JA007	33 1/16W	[M]
R2354	D0GB270JA007	27 1/16W	[M]
R2355	D0GB274JA007	270K 1/16W	[M]
R2356	D0GB184JA007	180K 1/16W	[M]
R2357	D0GB104JA007	100K 1/16W	[M]
R2401	D0GB153JA007	15K 1/16W	[M]
R2411	D0GB471JA041	470 1/16W	[M]
R2412	ERJ3GEYJ103V	10K 1/16W	[M]
R2413	D0GB104JA007	100K 1/16W	[M]
R2414	ERJ3GEY0R00V	0 1/16W	[M]
R2415	ERJ3GEYJ563V	56K 1/16W	[M]
R2416	D0GB222JA041	2.2K 1/16W	[M]
R2417	ERJ3GEYJ103V	10K 1/16W	[M]
R2418	D0GB104JA007	100K 1/16W	[M]
R2430	ERJ3GEY0R00V	0 1/16W	[M]
R2431	ERJ3GEY0R00V	0 1/16W	[M]
R2434	ERJ3GEY0R00V	0 1/16W	[M]
R2435	ERJ3GEYJ103V	10K 1/16W	[M]
R2436	D0GB392JA007	3.9K 1/16W	[M]
R2437	D0GB153JA007	15K 1/16W	[M]
R2441	D0GB270JA007	27 1/16W	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
R2442	D0GB330JA007	33 1/16W	[M]
R2443	D0GB270JA007	27 1/16W	[M]
R2444	D0GB330JA007	33 1/16W	[M]
R2445	D0GB152JA007	1.5K 1/16W	[M]
R2446	D0GB332JA007	3.3K 1/16W	[M]
R2447	D0GB1R0JA007	1 1/16W	[M]
R2451	D0GB330JA007	33 1/16W	[M]
R2452	D0GB270JA007	27 1/16W	[M]
R2453	D0GB330JA007	33 1/16W	[M]
R2454	D0GB270JA007	27 1/16W	[M]
R2455	D0GB274JA007	270K 1/16W	[M]
R2456	D0GB184JA007	180K 1/16W	[M]
R2457	D0GB104JA007	100K 1/16W	[M]
R2509	D0GB561JA007	560 1/16W	[M]
R2510	D0AF221JA039	220 1/4W	[M]
R2511	D0GB222JA041	2.2K 1/16W	[M]
R2512	D0GB104JA007	100K 1/16W	[M]
R2584	D0GB334JA007	330K 1/16W	[M]
R2585	D0GB334JA007	330K 1/16W	[M]
R2586	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2587	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2601	ERJ3GEY0R00V	0 1/16W	[M]
R2602	D0GB472JA041	4.7K 1/16W	[M]
R2603	D0GB271JA007	270 1/16W	[M]
R2604	ERJ3GEYJ102V	1K 1/16W	[M]
R2605	D0GB471JA041	470 1/16W	[M]
R2606	D0GB474JA041	470K 1/16W	[M]
R2607	D0GB331JA007	330 1/16W	[M]
R2610	ERJ3GEYJ102V	1K 1/16W	[M]
R2611	D0GB391JA041	390 1/16W	[M]
R2612	D0GB104JA007	100K 1/16W	[M]
R2613	ERJ3GEYJ103V	10K 1/16W	[M]
R2614	D0GB562JA007	5.6K 1/16W	[M]
R2615	D0GB561JA007	560 1/16W	[M]
R2616	ERJ3GEYJ102V	1K 1/16W	[M]
R2617	D0GB473JA041	47K 1/16W	[M]
R2618	D0GB332JA007	3.3K 1/16W	[M]
R2619	D0GB332JA007	3.3K 1/16W	[M]
R2620	D0GB473JA041	47K 1/16W	[M]
R2621	D0GB223JA041	22K 1/16W	[M]
R2622	D0GB272JA007	2.7K 1/16W	[M]
R2623	D0GB683JA007	68K 1/16W	[M]
R2624	D0GB330JA007	33 1/16W	[M]
R2625	D0GB471JA041	470 1/16W	[M]
R2626	ERJ3GEYJ102V	1K 1/16W	[M]
R2627	D0GB471JA041	470 1/16W	[M]
R2628	ERJ3GEYJ820V	82 1/16W	[M]
R2629	D0GB273JA007	27K 1/16W	[M]
R2630	ERJ3GEYJ103V	10K 1/16W	[M]
R2631	D0GB121JA007	120 1/16W	[M]
R2632	ERJ3GEYJ103V	10K 1/16W	[M]
R2633	ERJ3GEYJ102V	1K 1/16W	[M]
R2634	D0GB471JA041	470 1/16W	[M]
R2635	ERJ3GEYJ102V	1K 1/16W	[M]
R2636	ERJ3GEYJ102V	1K 1/16W	[M]
R2637	ERJ3GEYJ102V	1K 1/16W	[M]
R2638	D0GB332JA007	3.3K 1/16W	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
R2639	D0GB223JA041	22K 1/16W	[M]
R2640	D0GB223JA041	22K 1/16W	[M]
R2641	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2642	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2643	D0GB223JA041	22K 1/16W	[M]
R2644	D0GB121JA007	120 1/16W	[M]
R2645	D0GB104JA007	100K 1/16W	[M]
R2646	D0GB104JA007	100K 1/16W	[M]
R2651	ERJ3GEYJ820V	82 1/16W	[M]
R2652	ERJ3GEY0R00V	0 1/16W	[M]
R2671	ERJ3GEYJ103V	10K 1/16W	[M]
R2672	ERJ3GEYJ103V	10K 1/16W	[M]
R2673	D0GB473JA041	47K 1/16W	[M]
R2674	D0GB473JA041	47K 1/16W	[M]
R2675	D0GB472JA041	4.7K 1/16W	[M]
R2676	ERJ3GEYJ103V	10K 1/16W	[M]
R2677	D0C1121JA020	120 1W	[M]
R2699	ERJ3GEY0R00V	0 1/16W	[M]
R2701	ERJ3GEYJ102V	1K 1/16W	[M]
R2702	ERJ3GEYJ102V	1K 1/16W	[M]
R2703	D0GB224JA007	220K 1/16W	[M]
R2704	D0GB224JA007	220K 1/16W	[M]
R2705	D0GB332JA007	3.3K 1/16W	[M]
R2706	D0GB332JA007	3.3K 1/16W	[M]
R2801	ERJ3GEYJ103V	10K 1/16W	[M]
R2802	D0GB101JA007	100 1/16W	[M]
R2803	ERJ3GEYJ103V	10K 1/16W	[M]
R2810	D0GB223JA041	22K 1/16W	[M]
R2817	D0GB104JA007	100K 1/16W	[M]
R2818	D0GB104JA007	100K 1/16W	[M]
R2819	D0GB104JA007	100K 1/16W	[M]
R2820	D0GB104JA007	100K 1/16W	[M]
R2822	ERJ3GEYJ103V	10K 1/16W	[M]
R2825	ERJ3GEYJ103V	10K 1/16W	[M]
R2826	ERJ3GEYJ103V	10K 1/16W	[M]
R2830	D0GB104JA007	100K 1/16W	[M]
R2831	D0GB104JA007	100K 1/16W	[M]
R2832	D0GB104JA007	100K 1/16W	[M]
R2833	D0GB104JA007	100K 1/16W	[M]
R2841	ERJ3GEYJ103V	10K 1/16W	[M]
R2842	ERJ3GEYJ103V	10K 1/16W	[M]
R2843	ERJ3GEYJ102V	1K 1/16W	[M]
R2844	ERJ3GEYJ103V	10K 1/16W	[M]
R2845	ERJ3GEYJ103V	10K 1/16W	[M]
R2846	D0GB472JA041	4.7K 1/16W	[M]
R2847	D0GB101JA007	100 1/16W	[M]
R2848	D0GB101JA007	100 1/16W	[M]
R2849	ERJ3GEYJ102V	1K 1/16W	[M]
R2851	D0GB473JA041	47K 1/16W	[M]
R2852	D0GB101JA007	100 1/16W	[M]
R2853	D0GB101JA007	100 1/16W	[M]
R2854	D0GB473JA041	47K 1/16W	[M]
R2855	D0GB473JA041	47K 1/16W	[M]
R2856	D0GB473JA041	47K 1/16W	[M]
R2857	D0GB473JA041	47K 1/16W	[M]
R2858	D0GB101JA007	100 1/16W	[M]
R2859	D0GB101JA007	100 1/16W	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
R2860	D0GB101JA007	100 1/16W	[M]
R2861	D0GB101JA007	100 1/16W	[M]
R2862	D0GB101JA007	100 1/16W	[M]
R2863	D0GB473JA041	47K 1/16W	[M]
R2864	D0GB101JA007	100 1/16W	[M]
R2865	D0GB473JA041	47K 1/16W	[M]
R2866	D0GB473JA041	47K 1/16W	[M]
R2867	D0GB104JA007	100K 1/16W	[M]
R2871	D0GB223JA041	22K 1/16W	[M]
R2873	D0GB223JA041	22K 1/16W	[M]
R2874	D0GB472JA041	4.7K 1/16W	[M]
R2881	D0GB221JA041	220 1/16W	[M]
R2882	D0GB106JA007	10M 1/16W	[M]
R2883	D0GB334JA007	330K 1/16W	[M]
R2886	D0GB105JA007	1M 1/16W	[M]
R2894	D0GB473JA041	47K 1/16W	[M]
R2901	ERJ3GEYJ103V	10K 1/16W	[M]
R2902	ERDS1FVJ330T	33 1/2W	[M]
R2907	ERJ3GEYJ102V	1K 1/16W	[M]
R2908	D0GB331JA007	330 1/16W	[M]
R2909	D0GB222JA041	2.2K 1/16W	[M]
R2910	D0GB331JA007	330 1/16W	[M]
R2912	D0GB472JA041	4.7K 1/16W	[M]
R2914	D0GB472JA041	4.7K 1/16W	[M]
R2916	D0GB472JA041	4.7K 1/16W	[M]
R2918	ERJ3GEYJ103V	10K 1/16W	[M]
R2919	D0GB472JA041	4.7K 1/16W	[M]
R2920	D0GB472JA041	4.7K 1/16W	[M]
R2921	D0GB472JA041	4.7K 1/16W	[M]
R2922	ERJ3GEYJ103V	10K 1/16W	[M]
R2923	ERJ3GEY0R00V	0 1/16W	[M]
R2924	ERJ3GEYJ103V	10K 1/16W	[M]
R2925	D0GB472JA041	4.7K 1/16W	[M]
R2927	D0GB472JA041	4.7K 1/16W	[M]
R2928	ERJ3GEYJ103V	10K 1/16W	[M]
R2929	ERJ3GEYJ103V	10K 1/16W	[M]
R2930	ERJ3GEYJ103V	10K 1/16W	[M]
R2931	ERJ3GEYJ103V	10K 1/16W	[M]
R2936	ERJ3GEYJ102V	1K 1/16W	[M]
R2937	ERJ3GEYJ103V	10K 1/16W	[M]
R2939	D0GB473JA041	47K 1/16W	[M]
R2940	ERJ3GEYJ824V	820K 1/16W	[M]
R2941	ERJ3GEYJ103V	10K 1/16W	[M]
R2942	D0GB562JA007	5.6K 1/16W	[M]
R2943	ERJ3GEYJ103V	10K 1/16W	[M]
R2944	D0GB472JA041	4.7K 1/16W	[M]
R2945	ERJ3GEYJ103V	10K 1/16W	[M]
R2946	D0GB563JA007	56K 1/16W	[M]
R2947	D0AF270JA039	27 1/4W	[M]
R2948	D0GB101JA007	100 1/16W	[M]
R2949	D0GB473JA041	47K 1/16W	[M]
R2950	D0GB474JA041	470K 1/16W	[M]
R2951	D0GB474JA041	470K 1/16W	[M]
R2952	ERJ3GEYJ102V	1K 1/16W	[M]
R2953	ERJ3GEYJ103V	10K 1/16W	[M]
R2954	ERJ3GEYJ103V	10K 1/16W	[M]
R2955	D0GB274JA007	270K 1/16W	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
R2956	D0GB274JA007	270K 1/16W	[M]
R2957	ERJ3GEYJ102V	1K 1/16W	[M]
R2958	D0GB223JA041	22K 1/16W	[M]
R2959	ERJ3GEYJ102V	1K 1/16W	[M]
R2960	D0GB223JA041	22K 1/16W	[M]
R2961	ERJ3GEYJ102V	1K 1/16W	[M]
R2962	ERJ3GEYJ102V	1K 1/16W	[M]
R2963	D0GB104JA007	100K 1/16W	[M]
R2964	ERJ3GEYJ102V	1K 1/16W	[M]
R2965	D0GB472JA041	4.7K 1/16W	[M]
R2966	D0GB472JA041	4.7K 1/16W	[M]
R5101	ERJ3GEYJ103V	10K 1/16W	[M]
R5103	D0C1103JA020	10K 1W	[M]
R5105	ERJ3GEYJ103V	10K 1/16W	[M]
R5106	D0GB223JA041	22K 1/16W	[M]
R5107	D0GB561JA007	560 1/16W	[M]
R5108	D0GB470JA008	47 1/16W	[M]
R5109	ERJ3GEYJ102V	1K 1/16W	[M]
R5110	D0GB222JA041	2.2K 1/16W	[M]
R5111	D0GB104JA007	100K 1/16W	[M]
R5112	D0GB473JA041	47K 1/16W	[M]
R5113	D0GB473JA041	47K 1/16W	[M]
R5114	ERJ3GEYJ1R8V	1.8 1/16W	[M]
R5123	D0C14R7JA020	4.7 1W	[M]
R5126	ERJ3GEYJ102V	1K 1/16W	[M]
R5127	D0GB471JA041	470 1/16W	[M]
R5130	D0GB151JA007	150 1/16W	[M]
R5131	ERDS1FVJ222T	2.2K 1/2W	[M]
R5132	D0AF331JA039	330 1/4W	[M]
R5133	ERJ3GEYJ103V	10K 1/16W	[M]
R5134	ERJ3GEYJ122V	1.2K 1/16W	[M]
R5135	D0AE2R2JA048	2.2 1/4W	[M]
R5136	D0AE2R2JA048	2.2 1/4W	[M]
R5137	D0AE2R2JA048	2.2 1/4W	[M]
R5138	ERJ8GEYJ100V	10 1/8W	[M]
R5139	ERJ8GEYJ100V	10 1/8W	[M]
R5144	D0AF120JA039	12 1/4W	[M]
R5146	D0GB562JA007	5.6K 1/16W	[M]
R5147	D0AF2R2JA039	2.2 1/4W	[M]
R5148	D0GB562JA007	5.6K 1/16W	[M]
R5149	ERJ3GEYJ102V	1K 1/16W	[M]
R5150	D0GB224JA007	220K 1/16W	[M]
R5151	D0GB154JA007	150K 1/16W	[M]
R5152	ERJ3GEY0R00V	0 1/16W	[M]
R5153	ERJ3GEYJ102V	1K 1/16W	[M]
R5154	D0GB101JA007	100 1/16W	[M]
R5173	ERJ3GEYJ102V	1K 1/16W	[M]
R5174	ERJ3GEY0R00V	0 1/16W	[M]
R5201	ERJ3GEYJ102V	1K 1/16W	[M]
R5202	D0GB104JA007	100K 1/16W	[M]
R5203	ERJ3GEYJ103V	10K 1/16W	[M]
R5204	D0GB104JA007	100K 1/16W	[M]
R5205	D0GB104JA007	100K 1/16W	[M]
R5206	D0GB105JA007	1M 1/16W	[M]
R5207	ERJ3GEYJ682V	6.8K 1/16W	[M]
R5209	D0GB100JA007	10 1/16W	[M]
R5210	D0GB271JA007	270 1/16W	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
R5301	D0GB562JA007	5.6K 1/16W	[M]
R5302	D0GB562JA007	5.6K 1/16W	[M]
R5303	D0GB562JA007	5.6K 1/16W	[M]
R5304	D0GB562JA007	5.6K 1/16W	[M]
R5305	ERG1SJ220E	22 1W	[M]
R5306	ERG1SJ220E	22 1W	[M]
R5307	ERJ8GEYJ100V	10 1/8W	[M]
R5308	ERJ8GEYJ100V	10 1/8W	[M]
R5313	D0GB154JA007	150K 1/16W	[M]
R5317	ERJ3GEYJ103V	10K 1/16W	[M]
R5413	D0GB104JA007	100K 1/16W	[M]
R5514	ERJ3GEY0R00V	0 1/16W	[M]
R5951	D0AE332JA048	3.3K 1/4W	[M]
R5952	D0AE472JA048	4.7K 1/4W	[M]
R5953	D0AE151JA048	150 1/4W	[M]
R5957	D0AE103JA048	10K 1/4W	[M]
R5958	D0AE103JA048	10K 1/4W	[M]
R5960	D0AE472JA048	4.7K 1/4W	[M]
R5961	D0AE151JA048	150 1/4W	[M]
R5963	D0AF820JA039	82 1/4W	[M]
R6102	ERJ3GEYJ102V	1K 1/16W	[M]
R6103	D0GB222JA041	2.2K 1/16W	[M]
R6104	D0GB182JA007	1.8K 1/16W	[M]
R6105	D0GB222JA041	2.2K 1/16W	[M]
R6106	D0GB272JA007	2.7K 1/16W	[M]
R6107	D0GB472JA041	4.7K 1/16W	[M]
R6108	ERJ3GEYJ682V	6.8K 1/16W	[M]
R6109	ERJ3GEYJ103V	10K 1/16W	[M]
R6110	D0GB223JA041	22K 1/16W	[M]
R6199	ERJ3GEYJ103V	10K 1/16W	[M]
R6202	ERJ3GEYJ102V	1K 1/16W	[M]
R6203	D0GB222JA041	2.2K 1/16W	[M]
R6204	D0GB182JA007	1.8K 1/16W	[M]
R6205	D0GB222JA041	2.2K 1/16W	[M]
R6206	D0GB272JA007	2.7K 1/16W	[M]
R6207	D0GB472JA041	4.7K 1/16W	[M]
R6208	D0GB393JA007	39K 1/16W	[M]
R6302	ERJ3GEYJ102V	1K 1/16W	[M]
R6303	D0GB222JA041	2.2K 1/16W	[M]
R6304	D0GB182JA007	1.8K 1/16W	[M]
R6305	D0GB222JA041	2.2K 1/16W	[M]
R6306	D0GB272JA007	2.7K 1/16W	[M]
R6307	D0GB472JA041	4.7K 1/16W	[M]
R6308	ERJ3GEYJ682V	6.8K 1/16W	[M]
R6309	ERJ3GEYJ103V	10K 1/16W	[M]
R6310	D0GB223JA041	22K 1/16W	[M]
R6399	ERJ3GEYJ103V	10K 1/16W	[M]
R6458	D0GB472JA041	4.7K 1/16W	[M]
R6481	ERJ3GEY0R00V	0 1/16W	[M]
R6491	D0GB473JA041	47K 1/16W	[M]
R6492	D0GB473JA041	47K 1/16W	[M]
R6493	ERJ3GEYJ103V	10K 1/16W	[M]
R6501	D0GB561JA007	560 1/16W	[M]
R6502	D0GB334JA007	330K 1/16W	[M]
R6503	D0GB330JA007	33 1/16W	[M]
R6504	ERJ3GEYJ122V	1.2K 1/16W	[M]
R6505	D0GB334JA007	330K 1/16W	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
R6506	D0GB222JA041	2.2K 1/16W	[M]
R6507	ERJ3GEYJ102V	1K 1/16W	[M]
R6509	D0GB101JA007	100 1/16W	[M]
R6601	D0GB471JA041	470 1/16W	[M]
R6603	D0GB221JA041	220 1/16W	[M]
R6604	D0GB221JA041	220 1/16W	[M]
R6605	D0GB823JA007	82K 1/16W	[M]
R6631	ERD2FCVG470T	47 1/4W	[M]
R6632	ERD2FCVG470T	47 1/4W	[M]
R7111	ERJ3GEYJ103V	10K 1/16W	[M]
R7211	ERJ3GEYJ823V	82K 1/16W	[M]
R7212	ERJ3GEYJ821V	820 1/16W	[M]
R7214	ERJ3GEYJ471V	470 1/16W	[M]
R7217	ERJ3GEYJ102V	1K 1/16W	[M]
R7218	ERJ3GEYJ102V	1K 1/16W	[M]
R7220	ERJ3GEYJ105V	1M 1/16W	[M]
R7221	ERJ3GEYJ101V	100 1/16W	[M]
R7253	ERJ3GEYJ100V	10 1/16W	[M]
R7254	ERJ3GEYJ102V	1K 1/16W	[M]
R7315	ERJ3GEYJ332V	3.3K 1/16W	[M]
R7323	ERJ3GEYJ332V	3.3K 1/16W	[M]
R7325	ERJ3GEYJ331V	330 1/16W	[M]
R7327	ERJ3GEYJ102V	1K 1/16W	[M]
R7328	ERJ3GEYJ103V	10K 1/16W	[M]
R7329	ERJ3GEYJ102V	1K 1/16W	[M]
R7330	ERJ3GEYJ562V	5.6K 1/16W	[M]
R7331	ERJ3GEYJ223V	22K 1/16W	[M]
R7332	ERJ3GEYJ102V	1K 1/16W	[M]
R7335	ERJ3GEYJ101V	100 1/16W	[M]
R7336	ERJ3GEYJ100V	10 1/16W	[M]
R7339	ERJ3GEYJ102V	1K 1/16W	[M]
R7349	ERJ3GEYJ183V	18K 1/16W	[M]
R7601	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R7650	ERJ3GEYJ5R6V	5.6 1/16W	[M]
		CHIP JUMPERS	
W2501	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2503	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2506	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2508	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2510	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2511	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2512	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2513	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2514	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2517	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2518	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2520	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2523	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2525	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2526	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2530	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2531	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2532	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2534	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2535	ERJ3GEY0R00V	CHIP JUMPER	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
W2536	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2537	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2539	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2540	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2542	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2543	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2544	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2545	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2546	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2547	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2548	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2549	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2550	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2552	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2553	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2554	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2555	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2556	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2557	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2558	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2559	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2560	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2561	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2563	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2565	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2566	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2567	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2568	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2569	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2570	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2571	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2572	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2573	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2575	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2576	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2577	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2919	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5501	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5504	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5505	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5506	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5507	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5508	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5509	ERJ3GEY0R00V	CHIP JUMPER	[M]
W5511	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6501	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6502	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6503	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6504	ERJ3GEY0R00V	CHIP JUMPER	[M]
W6505	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7001	ERJ6GEY0R00V	CHIP JUMPER	[M]
W7002	ERJ6GEY0R00V	CHIP JUMPER	[M]
W7003	ERJ6GEY0R00V	CHIP JUMPER	[M]
W7004	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7005	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7006	ERJ6GEY0R00V	CHIP JUMPER	[M]
W7007	ERJ6GEY0R00V	CHIP JUMPER	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
W7008	ERJ6GEY0R00V	CHIP JUMPER	[M]
W7009	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7010	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7011	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7012	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7013	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7014	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7015	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7016	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7017	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7018	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7019	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7020	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7021	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7022	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7023	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7024	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7025	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7026	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7027	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7028	ERJ3GEY0R00V	CHIP JUMPER	[M]
K5101	B0EAKM000122	RECTIFIER	[M]
		CAPACITORS	
C1002	ECEA1HKN2R2B	2.2 50V	[M]
C1006	ECA1HAK010XB	1 50V	[M]
C1007	F0A2A472A034	4700P 100V	[M]
C1008	ECA1HAK010XB	1 50V	[M]
C1009	ECA1CAK470XB	47 16V	[M]
C1010	ECA1EAM101XB	100 25V	[M]
C1011	ECQV1H473JL3	0.047 50V	[M]
C1012	F1H1H102A219	1000P 50V	[M]
C1013	F1H1H102A219	1000P 50V	[M]
C1014	F1H1H102A219	1000P 50V	[M]
C1015	F1H1H102A219	1000P 50V	[M]
C1016	F1H1H222A013	2200P 50V	[M]
C1017	F1H1H222A013	2200P 50V	[M]
C1018	F1H1H332A013	3300P 50V	[M]
C1019	F1H1H102A219	1000P 50V	[M]
C1020	F1H1H471A219	470P 50V	[M]
C1021	F1H1H471A219	470P 50V	[M]
C1022	F1H1H102A219	1000P 50V	[M]
C1023	F1H1H102A219	1000P 50V	[M]
C1026	ECA0JAK470XB	47 6.3V	[M]
C1027	F1H1H102A219	1000P 50V	[M]
C1030	ECEA1AKA101B	100 10V	[M]
C1031	ECEA1AKA101B	100 10V	[M]
C1032	F1C1C183A023	0.018 16V	[M]
C1033	F1C1C183A023	0.018 16V	[M]
C1034	ECA1HAK3R3XB	3.3 50V	[M]
C1035	ECA1HAK3R3XB	3.3 50V	[M]
C1036	F1H1C333A071	0.033 16V	[M]
C1037	ECA1HAK3R3XB	3.3 50V	[M]
C1038	F1H1H221A748	220P 50V	[M]
C1039	F1H1H221A748	220P 50V	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
C1040	ECA1CAK100XB	10 16V	[M]
C1041	ECA1CAK100XB	10 16V	[M]
C1042	ECA1CAK220XB	22 16V	[M]
C1043	ECA1HAK4R7XB	4.7 50V	[M]
C1044	ECA1AAK330XB	33 10V	[M]
C1045	ECA1AAK220XB	22 10V	[M]
C1046	ECA1CAM221XB	220 16V	[M]
C1049	F1H1H332A013	3300P 50V	[M]
C1050	F1H1H332A013	3300P 50V	[M]
C1056	ECA1CAK100XB	10 16V	[M]
C1057	F1H1H102A219	1000P 50V	[M]
C1058	F1H1H102A219	1000P 50V	[M]
C1059	F1H1H103A219	0.01 50V	[M]
C2101	ECJ1VB1A105K	1 10V	[M]
C2112	ECJ1VB1C105K	1 16V	[M]
C2113	ECJ1VB1H103K	0.01 50V	[M]
C2114	ERJ3GEY0R00V	0 1/16W	[M]
C2121	F1H1H332A013	3300P 50V	[M]
C2122	ECJ1VB1C105K	1 16V	[M]
C2124	ERJ3GEY0R00V	0 1/16W	[M]
C2131	ERJ3GEY0R00V	0 1/16W	[M]
C2132	ECJ1VB1C105K	1 16V	[M]
C2134	ERJ3GEY0R00V	0 1/16W	[M]
C2152	ECJ1VB1C105K	1 16V	[M]
C2154	ERJ3GEY0R00V	0 1/16W	[M]
C2161	F1H1H103A219	0.01 50V	[M]
C2171	F1H1C104A041	0.1 16V	[M]
C2172	ECJ1VB1C823K	0.082 16V	[M]
C2173	ECJ1VB1H103K	0.01 50V	[M]
C2174	ECJ1VB1H103K	0.01 50V	[M]
C2175	ECJ1VB1H392K	3900P 50V	[M]
C2181	ECJ1VB1A105K	1 10V	[M]
C2182	F1H1A105A025	1 10V	[M]
C2183	ECJ1VB1C224K	0.22 16V	[M]
C2191	ECA1HAK4R7XB	4.7 50V	[M]
C2192	F1H1C104A041	0.1 16V	[M]
C2193	ECJ1VB1A105K	1 10V	[M]
C2194	ECJ1VB1A124K	0.12 10V	[M]
C2195	ECJ1VB1A474K	0.47 10V	[M]
C2201	ECJ1VB1A105K	1 10V	[M]
C2212	ECJ1VB1C105K	1 16V	[M]
C2213	ECJ1VB1H103K	0.01 50V	[M]
C2214	ERJ3GEY0R00V	0 1/16W	[M]
C2221	F1H1H332A013	3300P 50V	[M]
C2222	ECJ1VB1C105K	1 16V	[M]
C2224	ERJ3GEY0R00V	0 1/16W	[M]
C2231	ERJ3GEY0R00V	0 1/16W	[M]
C2232	ECJ1VB1C105K	1 16V	[M]
C2234	ERJ3GEY0R00V	0 1/16W	[M]
C2245	ECA1CAK100XB	10 16V	[M]
C2252	ECJ1VB1C105K	1 16V	[M]
C2254	ERJ3GEY0R00V	0 1/16W	[M]
C2261	F1H1H103A219	0.01 50V	[M]
C2271	F1H1A154A001	0.15 10V	[M]
C2272	ECJ1VB1A124K	0.12 10V	[M]
C2273	ECJ1VB1H103K	0.01 50V	[M]
C2274	ECJ1VB1H103K	0.01 50V	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
C2275	ECJ1VB1H392K	3900P 50V	[M]
C2281	ECJ1VB1A105K	1 10V	[M]
C2282	F1H1A105A025	1 10V	[M]
C2283	ECJ1VB1H473K	0.047 50V	[M]
C2301	ECJ1VB1A224K	0.22 10V	[M]
C2302	ECJ1VB1A224K	0.22 10V	[M]
C2311	ECJ1VB1A105K	1 10V	[M]
C2312	ECJ1VB1A105K	1 10V	[M]
C2313	F1H1H470A230	47P 50V	[M]
C2314	ECJ1VC1H100D	10P 50V	[M]
C2315	ECA1CAK220XB	22 16V	[M]
C2321	ECJ1VB1A105K	1 10V	[M]
C2325	ECA1HAK010XB	1 50V	[M]
C2329	ECJ1VB1H472K	4700P 50V	[M]
C2330	ECJ1VB1A224K	0.22 10V	[M]
C2341	F1H1H102A219	1000P 50V	[M]
C2342	ECJ1VB1A105K	1 10V	[M]
C2343	ECJ1VB1A474K	0.47 10V	[M]
C2344	ECJ1VB1A474K	0.47 10V	[M]
C2401	ECJ1VB1A124K	0.12 10V	[M]
C2402	ECJ1VB1A224K	0.22 10V	[M]
C2411	ECJ1VB1A105K	1 10V	[M]
C2412	ECJ1VB1A105K	1 10V	[M]
C2413	F1H1H470A230	47P 50V	[M]
C2414	ECJ1VC1H100D	10P 50V	[M]
C2415	ECA1CAK220XB	22 16V	[M]
C2431	ECJ1VB1C105K	1 16V	[M]
C2433	ECJ1VB1A105K	1 10V	[M]
C2436	ECJ1VB1A224K	0.22 10V	[M]
C2437	ECJ1VB1H472K	4700P 50V	[M]
C2441	F1H1H102A219	1000P 50V	[M]
C2442	ECJ1VB1A105K	1 10V	[M]
C2443	ECJ1VB1A474K	0.47 10V	[M]
C2444	ECJ1VB1A474K	0.47 10V	[M]
C2509	ECA1CAK330XB	33 16V	[M]
C2511	ECEA1HKN2R2B	2.2 50V	[M]
C2581	ECA1CAK101XB	100 16V	[M]
C2582	ECA1CAK101XB	100 16V	[M]
C2583	ECA1CAK101XB	100 16V	[M]
C2584	F1H1H221A748	220P 50V	[M]
C2585	F1H1H221A748	220P 50V	[M]
C2588	F1H1C104A041	0.1 16V	[M]
C2601	F1H1H103A219	0.01 50V	[M]
C2602	ECA1CAK100XB	10 16V	[M]
C2603	F1H1H103A219	0.01 50V	[M]
C2604	F1H1H102A219	1000P 50V	[M]
C2606	F1H1H102A219	1000P 50V	[M]
C2607	ECJ1VB1E473K	0.047 25V	[M]
C2608	ECJ1VC1H080D	8P 50V	[M]
C2609	F1H1H102A219	1000P 50V	[M]
C2610	F1H1H103A219	0.01 50V	[M]
C2611	ECA1HAK4R7XB	4.7 50V	[M]
C2612	F1H1H103A219	0.01 50V	[M]
C2613	F1H1H102A219	1000P 50V	[M]
C2614	ECA1HAK3R3XB	3.3 50V	[M]
C2615	ECA1HAK4R7XB	4.7 50V	[M]
C2616	F1H1C333A071	0.033 16V	[M]

[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
C2617	F1H1H103A219	0.01 50V	[M]
C2618	F1H1H103A219	0.01 50V	[M]
C2620	ECA1CAK100XB	10 16V	[M]
C2621	ECA1HAKR47XB	0.47 50V	[M]
C2622	ECA1HAK010XB	1 50V	[M]
C2623	ECA1HAK010XB	1 50V	[M]
C2624	ECJ1VC1H101K	100P 50V	[M]
C2625	ECA1CAK220XB	22 16V	[M]
C2626	ECJ1VF1C105Z	1 16V	[M]
C2627	ECA1CAK220XB	22 16V	[M]
C2629	ECA0JAK101XB	100 6.3V	[M]
C2630	ECA0JAK101XB	100 6.3V	[M]
C2631	ECJ1VC1H151J	150P 50V	[M]
C2632	F1H1H102A219	1000P 50V	[M]
C2633	ECJ1VC1H120J	12P 50V	[M]
C2634	ECJ1VC1H120J	12P 50V	[M]
C2636	F1H1H102A219	1000P 50V	[M]
C2637	F1H1H332A013	3300P 50V	[M]
C2638	F1H1H103A219	0.01 50V	[M]
C2639	ECA1HAK4R7XB	4.7 50V	[M]
C2641	ECA1HAK010XB	1 50V	[M]
C2642	ECA1HAK010XB	1 50V	[M]
C2643	ECJ1VB1H682K	6800P 50V	[M]
C2644	ECJ1VB1H682K	6800P 50V	[M]
C2647	F1H1H102A219	1000P 50V	[M]
C2648	F1H1H103A219	0.01 50V	[M]
C2649	F1H1C104A008	0.1 16V	[M]
C2671	ECJ1VC1H101K	100P 50V	[M]
C2673	ECJ1VC1H101K	100P 50V	[M]
C2674	F1H1H103A219	0.01 50V	[M]
C2678	F1H1H103A219	0.01 50V	[M]
C2701	F1H1H103A219	0.01 50V	[M]
C2702	ECA1CAK101XB	100 16V	[M]
C2703	F1H1H471A219	470P 50V	[M]
C2704	F1H1H471A219	470P 50V	[M]
C2705	ECA1HAK010XB	1 50V	[M]
C2706	ECA1HAK010XB	1 50V	[M]
C2711	ECA1CAK101XB	100 16V	[M]
C2712	F1H1H103A219	0.01 50V	[M]
C2753	F1H1C104A041	0.1 16V	[M]
C2802	ECA1HAK2R2XB	2.2 50V	[M]
C2803	ECJ1VB1A105K	1 10V	[M]
C2821	ECJ1VC1H101K	100P 50V	[M]
C2852	ECA1CAK101XB	100 16V	[M]
C2853	F1H1C104A041	0.1 16V	[M]
C2871	F1H1H331A013	330P 50V	[M]
C2872	F1H1C223A001	0.022 16V	[M]
C2874	F1H1H331A013	330P 50V	[M]
C2882	ECJ1VC1H180J	18P 50V	[M]
C2883	ECJ1VC1H180J	18P 50V	[M]
C2901	F1H1C104A041	0.1 16V	[M]
C2903	F1H1H103A219	0.01 50V	[M]
C2904	ECA1CAK101XB	100 16V	[M]
C2906	F1H1H102A219	1000P 50V	[M]
C2910	ECJ1VB1H681K	680P 50V	[M]
C2940	F1H1C104A041	0.1 16V	[M]
C2941	ECA1CAK330XB	33 16V	[M]

[illegible]	[illegible]	[illegible]	[illegible]

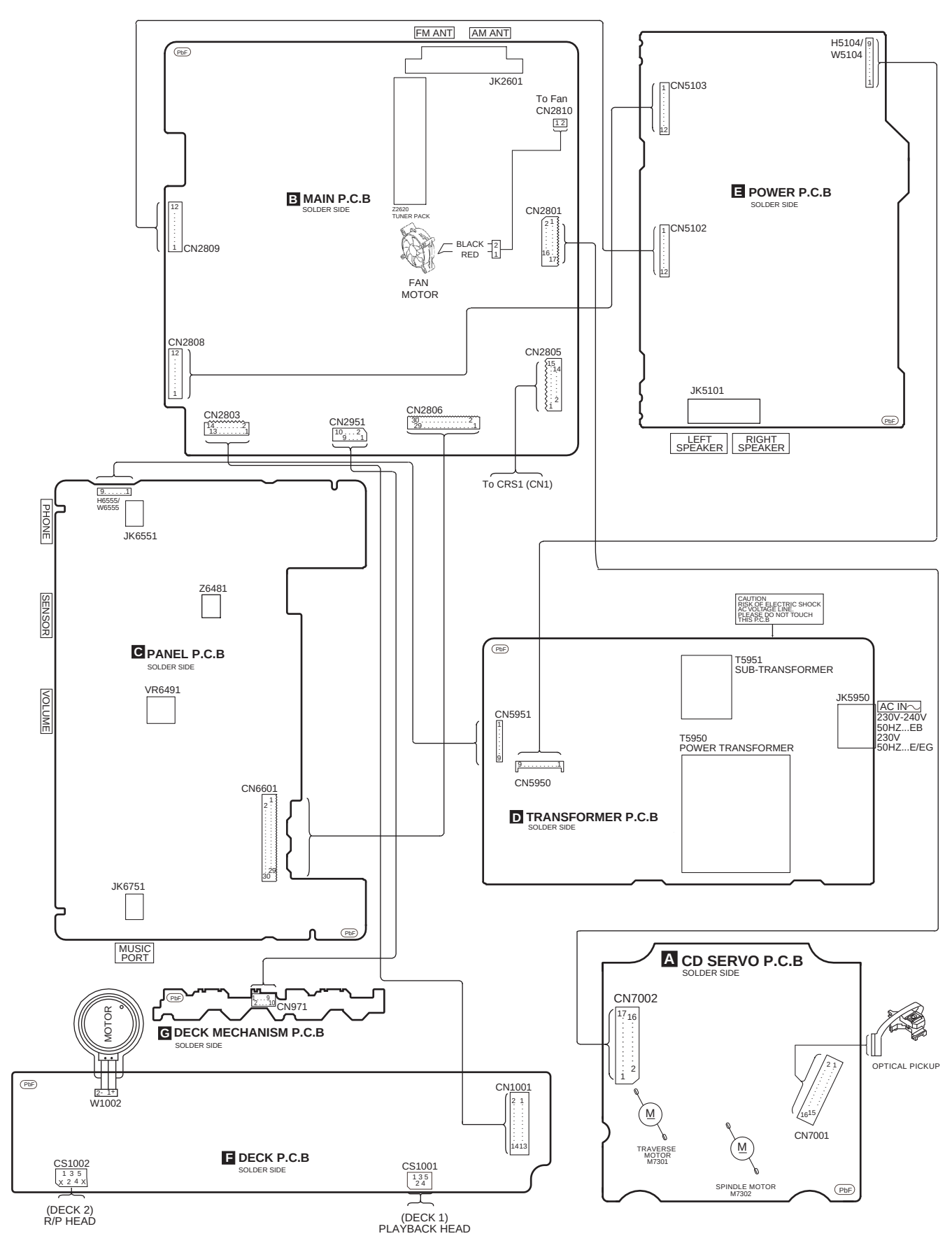
Ref. No.	Part No.	Part Name & Description	Remarks
C2943	ECA1HAK2R2XB	2.2 50V	[M]
C2944	ECJ1VC1H101K	100P 50V	[M]
C2945	ECA1CAK470XB	47 16V	[M]
C2947	ECA0JAK101XB	100 6.3V	[M]
C2948	ECA1AAK221XB	220 10V	[M]
C2957	ECJ1VC1H101K	100P 50V	[M]
C2959	ECJ1VC1H101K	100P 50V	[M]
C2961	ECJ1VC1H101K	100P 50V	[M]
C2962	ECJ1VC1H101K	100P 50V	[M]
C2963	F1H1H470A230	47P 50V	[M]
C2964	ECA1CAK101XB	100 16V	[M]
C2965	F1H1H102A219	1000P 50V	[M]
C2966	ECJ1VB1H104K	0.1 50V	[M]
C2967	F1H1H470A230	47P 50V	[M]
C2968	ECJ1VB1H561K	560P 50V	[M]
C2969	ECA1CAK100XB	10 16V	[M]
C2970	F1H1H331A013	330P 50V	[M]
C2971	ECA1CAK100XB	10 16V	[M]
C2976	ECA1CAK100XB	10 16V	[M]
C5101	F2A1V102A154	1000P 35V	[M]
C5102	ECA2AM100B	10 100V	[M]
C5103	ECA2AM100B	10 100V	[M]
C5104	F2A1V102A154	1000P 35V	[M]
C5105	ECA1AAK221XB	220 10V	[M]
C5106	ECJ1VB1H104K	0.1 50V	[M]
C5107	ECJ1VB1H104K	0.1 50V	[M]
C5109	ECA1EAM101XB	100 25V	[M]
C5110	ECA1EAM101XB	100 25V	[M]
C5111	ECA0JAK101XB	100 6.3V	[M]
C5112	ECA1EAK100XB	10 25V	[M]
C5113	ECA1HM330B	33 50V	[M]
C5114	ECJ1VB1H104K	0.1 50V	[M]
C5115	ECJ1VB1H104K	0.1 50V	[M]
C5121	ECA1HAM470XB	47 50V	[M]
C5123	F2A1V102A154	1000P 35V	[M]
C5124	F2A1V102A154	1000P 35V	[M]
C5151	F1H1H101A230	100P 50V	[M]
C5152	ECJ1VB1H104K	0.1 50V	[M]
C5153	F1H1H101A230	100P 50V	[M]
C5155	F1H1H102A219	1000P 50V	[M]
C5157	F1H1H103A219	0.01 50V	[M]
C5158	F1H1H103A219	0.01 50V	[M]
C5159	F1H1H103A219	0.01 50V	[M]
C5171	ECA1HM102E	1000 50V	[M]
C5172	ECA1HM102E	1000 50V	[M]
C5186	ECJ1VB1H104K	0.1 50V	[M]
C5187	ECJ1VB1H104K	0.1 50V	[M]
C5201	F1H1H471A219	470P 50V	[M]
C5202	ECJ1VC1H101K	100P 50V	[M]
C5203	ECJ1VC1H101K	100P 50V	[M]
C5204	ECJ1VC1H101K	100P 50V	[M]
C5205	ECJ1VB1H104K	0.1 50V	[M]
C5208	F2A0J681A550	680P 6.3V	[M]
C5210	F1H1H221A748	220P 50V	[M]
C5301	ECJ1VB1A474K	0.47 10V	[M]
C5302	F1H1H331A013	330P 50V	[M]
C5303	ECJ1VB1A474K	0.47 10V	[M]

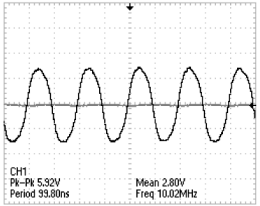
[illegible]	[illegible]	[illegible]	[illegible]

Ref. No.	Part No.	Part Name & Description	Remarks
C5305	F1H1H331A013	330P 50V	[M]
C5308	ECJ1VB1H104K	0.1 50V	[M]
C5309	ECJ1VB1H104K	0.1 50V	[M]
C5310	F1K2A1040007	0.1 100V	[M]
C5311	F1H1H221A748	220P 50V	[M]
C5312	ECJ1VB1H104K	0.1 50V	[M]
C5313	ECJ1VB1H153K	0.015 50V	[M]
C5314	F1K2A1040007	0.1 100V	[M]
C5315	ECJ1VB1H104K	0.1 50V	[M]
C5316	ECJ1VB1H104K	0.1 50V	[M]
C5317	ECJ1VB1H104K	0.1 50V	[M]
C5318	F1K2A1040007	0.1 100V	[M]
C5319	ECJ1VB1H153K	0.015 50V	[M]
C5320	ECJ1VB1H104K	0.1 50V	[M]
C5321	F1K2A1040007	0.1 100V	[M]
C5322	ECJ1VB1H104K	0.1 50V	[M]
C5323	ECJ1VB1H104K	0.1 50V	[M]
C5324	ECQV1H684JL3	0.68 50V	[M]
C5325	ECJ1VB1H104K	0.1 50V	[M]
C5326	ERJ3GEY0R00V	0 1/16W	[M]
C5327	ECQV1H684JL3	0.68 50V	[M]
C5328	ECJ1VB1H104K	0.1 50V	[M]
C5329	ERJ3GEY0R00V	0 1/16W	[M]
C5330	F1H2A221A009	220P 100V	[M]
C5331	F1H2A221A009	220P 100V	[M]
C5332	F1H2A221A009	220P 100V	[M]
C5333	F1H2A221A009	220P 100V	[M]
C5335	ECJ1VB1H153K	0.015 50V	[M]
C5336	F1H1H102A219	1000P 50V	[M]
C5337	F1H1H102A219	1000P 50V	[M]
C5339	ECJ1VB1A474K	0.47 10V	[M]
C5340	ECJ1VB1A474K	0.47 10V	[M]
C5343	ECJ1VB1H153K	0.015 50V	[M]
C5435	ECJ1VB1H153K	0.015 50V	[M]
C5701	ECA0JAK101XB	100 6.3V	[M]
C5920	ECA1HM102E	1000 50V	[M]
C5940	ECA1HM102E	1000 50V	[M]
C5950	ECA1EAM222XE	2200 25V	[M]
C5951	F1B1H103A007	0.01 50V	[M]
C5952	ECA1AAK470XB	47 10V	[M]
C5953	F1B1H103A007	0.01 50V	[M]
C5954	F1B1H103A007	0.01 50V	[M]
C5955	ECA1HM220B	22 50V	[M]
C5956	ECA1HAM470XB	47 50V	[M]
C5957	ECA1HAK100XB	10 50V	[M]
C5958	F1B1H103A007	0.01 50V	[M]
C5959	F1B1H103A007	0.01 50V	[M]
C5960	ECQE2104KF3	0.1 250V	[M]
C5963	ECA1HAK4R7XB	4.7 50V	[M]
C6481	ECA1HM220B	22 50V	[M]
C6491	ECJ1VC1H101K	100P 50V	[M]
C6492	ECJ1VC1H101K	100P 50V	[M]
C6551	F1H1H103A219	0.01 50V	[M]
C6552	F1H1H103A219	0.01 50V	[M]
C6553	F1H1H103A219	0.01 50V	[M]
C6601	ECJ1VC1H101K	100P 50V	[M]
C6603	ECJ1VC1H101K	100P 50V	[M]

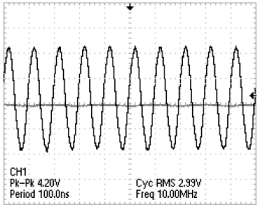
Ref. No.	Part No.	Part Name & Description	Remarks
C6604	ECJ1VC1H101K	100P 50V	[M]
C6623	ECA1HM220B	22 50V	[M]
C6631	ECA1HM220B	22 50V	[M]
C6632	ECA1HM220B	22 50V	[M]
C6635	ECA1HM220B	22 50V	[M]
C6636	ECJ1VC1H101K	100P 50V	[M]
C6751	F1H1H103A219	0.01 50V	[M]
C6752	F1H1H103A219	0.01 50V	[M]
C6753	F1H1H103A219	0.01 50V	[M]
C7102	ECJ1VB1A474K	0.47 10V	[M]
C7107	ECJ1VB1H223K	0.022 50V	[M]
C7142	ECJ1VB1H332K	3300P 50V	[M]
C7154	ECJ1VB1C104K	0.1 16V	[M]
C7155	ECJ1VB1C104K	0.1 16V	[M]
C7161	ECJ1VB1C104K	0.1 16V	[M]
C7164	ECJ2FF1A106Z	10 10V	[M]
C7165	ECJ2FF1A106Z	10 10V	[M]
C7166	ECJ1VB1H103K	0.01 50V	[M]
C7203	F2A0J221A200	220P 6.3V	[M]
C7204	ECJ1VB1C104K	0.1 16V	[M]
C7216	ECJ1VB1H681K	680P 50V	[M]
C7217	ECJ1VB1C104K	0.1 16V	[M]
C7218	ECJ1VB1C823K	0.082 16V	[M]
C7223	ECEA1HKA4R7I	4.7 50V	[M]
C7225	ECJ1VB1H102K	1000P 50V	[M]
C7226	ECJ1VB1H102K	1000P 50V	[M]
C7227	ECA1HAK010XI	1 50V	[M]
C7228	ECA1HAK010XI	1 50V	[M]
C7230	ECJ1VB1C104K	0.1 16V	[M]
C7231	F2A0J221A200	220P 6.3V	[M]
C7232	F2A0J221A200	220P 6.3V	[M]
C7233	ECJ1VF1C104Z	0.1 16V	[M]
C7234	ECJ1VB1C104K	0.1 16V	[M]
C7235	ECEA1CKA100I	10 16V	[M]
C7241	ECJ1VB1H102K	1000P 50V	[M]
C7243	ECJ1VF1C104Z	0.1 16V	[M]
C7244	ECJ1VB1C153K	0.015 16V	[M]
C7253	ECJ1VB1H471K	470P 50V	[M]
C7263	ECJ1VB1C104K	0.1 16V	[M]
C7264	ECJ1VB1C104K	0.1 16V	[M]
C7315	ECJ1VB1A474K	0.47 10V	[M]
C7334	ECEA1AKA221I	220 10V	[M]
C7335	ECJ1VF1C104Z	0.1 16V	[M]
C7338	ECJ1VB1C563K	0.056 16V	[M]
C7339	ECJ1VB1C183K	0.018 16V	[M]
C7352	ECJ1VB1C183K	0.018 16V	[M]
C7601	ECEA0JKA330I	33 6.3V	[M]
C7613	ECJ1VB1C104K	0.1 16V	[M]
C7614	F2A0J101A013	100P 6.3V	[M]
C7626	ECJ1VB1C104K	0.1 16V	[M]
C7670	ECJ1VB1C104K	0.1 16V	[M]

PRT0512 S/P/D/N/A

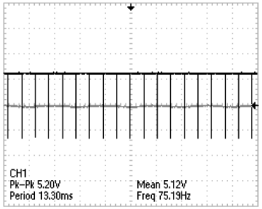

FM ANT
AM ANT
JK2601
To Fan
CN2810
B MAIN P.C.B
SOLDER SIDE
Z2620
TUNER PACK
CN2809
CN2801
BLACK
RED
FAN
MOTOR
CN2808
CN2805
CN2803
CN2951
CN2806
To CRS1 (CN1)
H5104/
W5104
CN5103
CN5102
E POWER P.C.B
SOLDER SIDE
JK5101
LEFT
SPEAKER
RIGHT
SPEAKER
PHONE
SENSOR
VOLUME
H6555/
W6555
JK6551
Z6481
C PANEL P.C.B
SOLDER SIDE
VR6491
CN6601
JK6751
MUSIC
PORT
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH
THIS P.C.B
T5951
SUB-TRANSFORMER
JK5950
AC IN
230V-240V
50HZ...EB
230V
50HZ...E/EG
CN5951
CN5950
T5950
POWER TRANSFORMER
D TRANSFORMER P.C.B
SOLDER SIDE
A CD SERVO P.C.B
SOLDER SIDE
CN7002
OPTICAL PICKUP
CN7001
TRAVERSE
MOTOR
M7301
SPINDLE MOTOR
M7302
MOTOR
CN971
G DECK MECHANISM P.C.B
SOLDER SIDE
W1002
CN1001
F DECK P.C.B
SOLDER SIDE
CS1002
(DECK 2)
R/P HEAD
CS1001
(DECK 1)
PLAYBACK HEAD



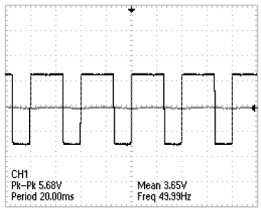
IC2801 PIN 13
CD PLAY
5.92Vp-p (50nsec.div)



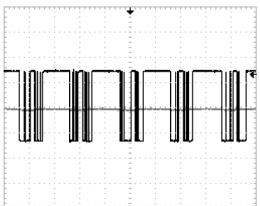
IC2801 PIN 15
CD PLAY
4.2Vp-p (100nsec.div)



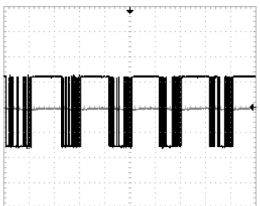
IC2801 PIN 19
CD PLAY
5.2Vp-p (25msec.div)



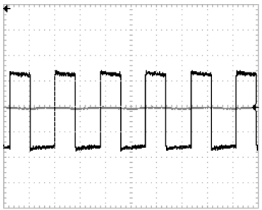
IC2801 PIN 20
CD PLAY
5.68Vp-p (10msec.div)



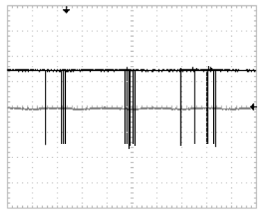
IC2801 PIN 70
CD PLAY
6.06Vp-p (10msec.div)



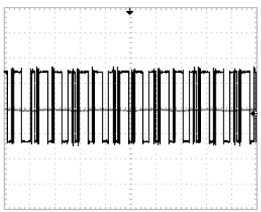
IC2801 PIN 71
CD PLAY
5.84Vp-p (10msec.div)



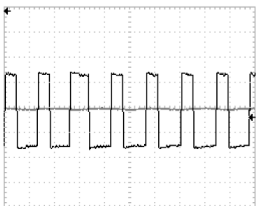
IC2801 PIN 72
CD PLAY
6.32Vp-p (5usec.div)



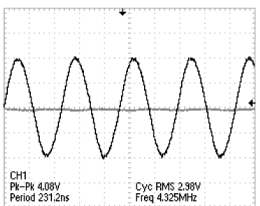
IC2801 PIN 76
CD PLAY
6.48Vp-p (2.5msec.div)



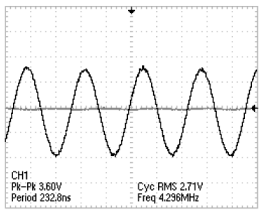
IC2801 PIN 77
CD PLAY
6.24Vp-p (25msec.div)



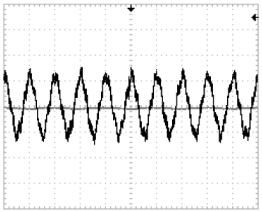
IC2801 PIN 78
CD PLAY
6.03Vp-p (5usec.div)



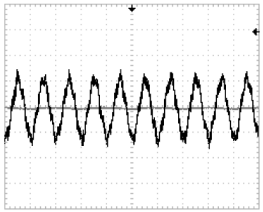
IC2809PIN 8
CD PLAY
4.08Vp-p (100nsec.div)



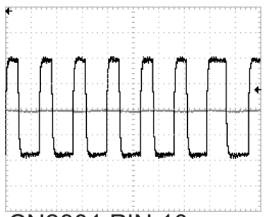
IC2809 PIN 9
CD PLAY
3.6Vp-p (100nsec.div)



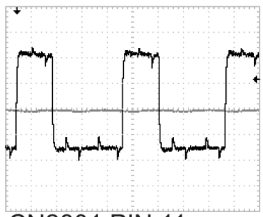
CN2801 PIN 1
CD PLAY
600mVp-p (1msec.div)



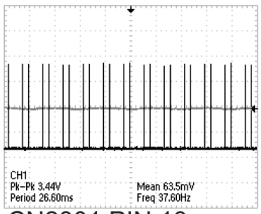
CN2801 PIN 3
CD PLAY
616mVp-p (1msec.div)



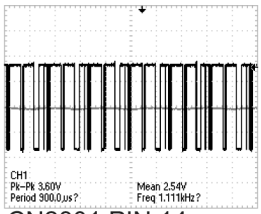
CN2801 PIN 10
CD PLAY
3.96Vp-p (5msec.div)



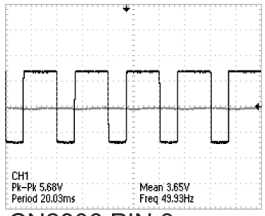
CN2801 PIN 11
CD PLAY
3.66Vp-p (5usec.div)



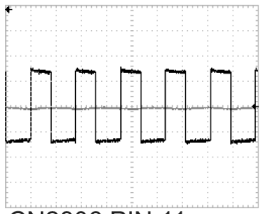
CN2801 PIN 13
CD PLAY
3.44Vp-p (50msec.div)



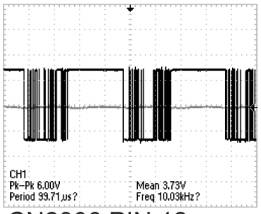
CN2801 PIN 14
CD PLAY
3.6Vp-p (25msec.div)



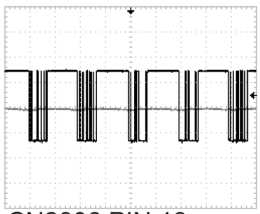
CN2806 PIN 3
CD PLAY
5.68Vp-p (10msec.div)



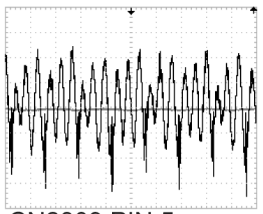
CN2806 PIN 11
CD PLAY
6.08Vp-p (5usec.div)



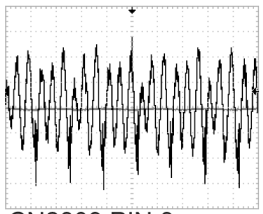
CN2806 PIN 12
CD PLAY
6Vp-p (5msec.div)



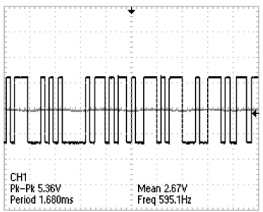
CN2806 PIN 13
CD PLAY
5.68Vp-p (10msec.div)



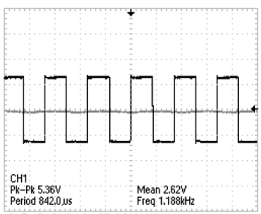
CN2809 PIN 5
CD PLAY
119mVp-p (1usec.div)



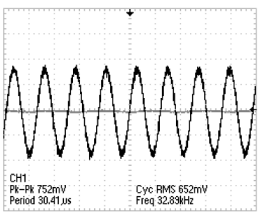
CN2809 PIN 8
CD PLAY
121mVp-p (1usec.div)



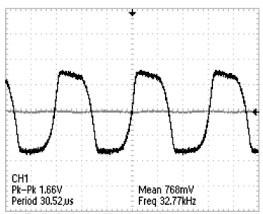
IC2801 PIN 4
CD PLAY
5.36Vp-p (5msec.div)



IC2801 PIN 5
CD PLAY
5.36Vp-p (500usec.div)



IC2801 PIN 10
CD PLAY
752mVp-p (25usec.div)



IC2801 PIN 11
CD PLAY
1.66Vp-p (10usec.div)

POWER P.C.B.

Ref No.	IC5201																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14						
CD PLAY	0	5	2.4	2.5	2.3	2.4	0	4.2	1.6	2.5	2.6	3.2	1.5	5						
STANDBY	0	0	0	0	0	0	0	0	0	0.07	0	0	0	0						
Ref No.	IC5301																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.43	0.05	0.05	28.54	-0.02	-30	-22	28.95	11	-0.1	-30	-18	-30	-0.1	10.8	29	-30	-30	0	28.6
STANDBY	0.1	0	0	0.1	0	0.5	0.1	0.1	0.05	0.2	0.5	0.1	0.5	0.2	0	0.1	0.5	0.8	0	0.1
Ref No.	IC5301																			
MODE	21	22	23																	
CD PLAY	-0.1	-0.1	4.6																	
STANDBY	0	0	0																	

POWER P.C.B.

Ref No.	Q5101				Q5102				Q5103				Q5104				Q5108			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	29	40.7	32.5		-41	30.4	-37.7		0	5.4	-0.3		-0.3	5.4	0		-41	-37.8	-40.5	
STANDBY	0	0	10.5		-1	0	0		0	0.5	0.2		0.2	0.5	0		-0.6	0	0.7	
Ref No.	Q5109				Q5110				Q5111				Q5112				Q5113			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	-5	-15.3	-3.6		28.4	32.5	29		15.4	28.3	16.1		17.1	12	16.4		17.3	16.5	17.1	
STANDBY	0	-0.7	0		0	11	0		0.06	0.06	0.07		0.42	0.08	0.45		0.47	0.45	0.47	
Ref No.	Q5114				Q5115				Q5201				Q5202							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	11.3	16.4	11.8		5.1	5.7	8		2.6	2.5	2.4		2.6	0	5.1					
STANDBY	0	0.43	0.47		0	0	0		0	0	0		0	0	0					

TRANSFORMER P.C.B.

Ref No.	Q5950				Q5951				Q5952				Q5953							
MODE	E	C	B		E	C	B		E	C	B		E	C	B					
CD PLAY	6.2	6.8	12.2		-24.6	-45	-25		0	3.6	-0.4		0	0.1	0.8					
STANDBY	6.2	6.8	14.8		-20	-20	-20		0	3.8	-0.4		0	6.2	0					
Ref No.																				
MODE																				
CD PLAY																				
STANDBY																				
Ref No.																				
MODE																				
CD PLAY																				
STANDBY																				
Ref No.																				
MODE																				
CD PLAY																				
STANDBY																				

Ref No.	IC2803																		
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0	4.6	4.6	4.6	4.6	4.6	4.6	4.6
STANDBY	0	4.6	0	0	4.6	4.6	4.6	0	0	4.6	0	4.6	0	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Ref No.	IC2803																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0	0	0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	9.2	5.5	0
STANDBY	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0	0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	9.2	5.5	0
Ref No.	IC2803																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56				
CD PLAY	0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.6	4.6	4.6	8	2.2				
STANDBY	0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5	0	0	4.6	0	0	0				
Ref No.	IC2804																			
MODE	1	2	3	4	5	6	7	8												
CD PLAY	7.5	7.4	7.3	0	15.1	7.5	7.4	7.3												
STANDBY	7.5	7.4	7.3	0	15.1	7.5	7.5	7.3												
Ref No.	IC2809																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	2.5	0	5	0	2.5	0	0	2.6	2.5	0	0	0	0	0	0	0				
STANDBY	2.5	2.5	5	0	2.5	2.5	0	2.6	2.5	0	5.1	0	0	2.6	0	0				
Ref No.																				
MODE																				
CD PLAY																				
STANDBY																				

CD SERVO P.C.B.(SIDE A)

Ref No.	Q7601		
MODE	E	C	B
CD PLAY	3.2	2.1	2.5
STANDBY	3.4	0.2	3.4

MAIN P.C.B.

Ref No.	Q2142			Q2242			Q2311			Q2317			Q2341		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
CD PLAY	0	0	0	0	0	0	0	0	-3.5	0	0	-3.5	0	0	-3.5
STANDBY	0	0	0	0	0	0	0	0	0.6	0	0	0.6	0	0	0.6
Ref No.	Q2411			Q2417			Q2441			Q2501			Q2511		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
CD PLAY	0	0	-3.5	0	0	-3.5	-	-	-	0.3	2.2	1	0	-3.9	0
STANDBY	0	0	0.6	0	0	0.6	0	0	0.6	0.4	0.6	1.1	2.7	2.7	0
Ref No.	Q2521			Q2601			Q2606			Q2610			Q2803		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
CD PLAY	0.1	2.6	0.8	0	0	0	15.1	0	15.1	1.6	7.6	2.2	0	5.5	0
STANDBY	0.1	2.9	0.8	0	0	0	14.9	0	14.9	1.6	7.6	2.2	0	5.5	0
Ref No.	Q2901			Q2902			Q2906			Q2907			Q2936		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
CD PLAY	5.7	3.4	5	2.6	5.1	3.2	0	5.1	0	0	1.7	0.4	12	0	12
STANDBY	6.9	3.4	6.2	2.6	6.2	2.2	0	5.1	0	0	5.1	0	12.1	2	12.1
Ref No.	Q2937			Q2942			Q2943			Q2948			Q2949		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
CD PLAY	0	12	0	12	0	12	0	12	0	0	0	0.2	0	5.4	0
STANDBY	0	12.1	0	12.1	0	0	0	12	0	0	0	0.2	0	5.4	0
Ref No.	Q2950			Q2951			Q2952			Q2957			Q2958		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
CD PLAY	5.5	5.5	4.8	5.5	5.5	0	0	0.1	5.4	0	12	0	12	0	12
STANDBY	5.5	5.5	4.8	5.5	5.5	4.8	0	0.1	5.4	0	12.1	0	2.6	6.2	3.2
Ref No.	Q2959			Q2960			Q2978			Q2980					
MODE	E	C	B	E	C	B	E	C	B	E	C	B			
CD PLAY	0	12	0	12	0	12	5.1	0	5.4	5.1	-0.4	5.4			
STANDBY	0	12.1	0	12.1	0	0	5.1	0	5.4	5.1	-0.4	5.4			

CD SERVO P.C.B.(SIDE A)

Ref No.	IC7001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.4
STANDBY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7	0	0	1.6	0
Ref No.	IC7001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	0	1.7	1.7	1.9	0	3.4	1.5	3.4	3.4	0	1.7	1.6	1.7	1.8	1.8	1.7	1.7	1.7	1.7
STANDBY	1.7	3.4	1.7	1.7	1.7	0	3.4	1.5	3.4	3.4	0	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Ref No.	IC7001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0.2	2.5	1.4	1.7	1.7	1.8	3.4	1.2	1.2	1.3	1.7	1.7	0.8	1.5	1.5	1.5	0	3.1	1.5	0
STANDBY	0	3.4	1.4	1.7	1.7	1.8	3.4	1.2	1.2	1.2	0	1.7	0.8	1.1	0	1.5	0	3.1	1.5	0
Ref No.	IC7001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	3.4	3.4	0	0	0	0	3	2.5	3.7	2.3	0	3.7	0	1.7	0	1.5	3.4	0	3.4	1.7
STANDBY	3.4	0.8	0.8	0	3.2	0	3.7	0	3.7	0	0	3.7	0	1.7	0	1.5	3.4	0	3.4	1.7
Ref No.	IC7001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	-	3.4	0	0	0	0	0	0	0	0	0	0	3.4	0	0	0	0	0	0	0
STANDBY	1.6	3.4	0	0	0	0	0	0	0	0	0	0	3.4	0	0	0	0	0	0	0
Ref No.	IC7002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.7	0	1.7	0	0	0	0	0	0	7.2	4	3.4	3.4	3.4	3	3.8	3.5	3.2	7.2	0
STANDBY	1.7	0	1.7	3.3	0	0	0	0	0	7.5	3.8	3.8	3.4	3.4	3.4	3.4	3.4	3.4	7.5	0
Ref No.	IC7002																			
MODE	21	22	23	24	25	26	27	28												
CD PLAY	7.3	0	0	0	7.3	1.7	1.7	1.7												
STANDBY	7.5	0	0	0	7.5	1.7	1.7	1.7												

MAIN P.C.B.

Ref No.	IC2601																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2	0	2	0	0	5	5.2	3.8	6	0	4.9	3.6	0	1.5	1.9	2	2	0	0	0.1
STANDBY	2	6	2	2	0	5	5.2	0	6	0	4.9	0	1.5	1.5	1.9	2	2	0	0	0
Ref No.	IC2601																			
MODE	21	22	23	24																
CD PLAY	2.4	2.4	6	4.6																
STANDBY	2.4	2.4	6	4.6																
Ref No.	IC2602																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.6	0	0	0	5.2	0	1.2	4.6	0	14.9	0	0	2.6	0	0	0	0	15	0	2.6
STANDBY	2.6	0	0	0	5.2	4.9	0.8	4.6	0	15	0	0	2.6	0	5.2	0	0	0	0	0
Ref No.	IC2801																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	2.5	0	0	2.5	2.5	0	0	0	0	0	0.0	0.7	5.5	2.7	-	5.5	5.5	5.4	5.5	3.6
STANDBY	0	0	0	2.4	2.5	0	0	0	0	0.6	0.7	0	2.7	0	2.7	5.5	5.5	5.5	0	3.7
Ref No.	IC2801																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	5.1	5.1	0	0	0	0	5.5	0	0	0	0	0	0	0	0	0	5.4	0	5.4	0
STANDBY	5.2	5.1	0	0	0	0	5.5	0	0	0	0	0	5	0	0	0	5.4	0	5.5	5.5
Ref No.	IC2801																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	0	0	0	5.4	5..4	0	0	0	0	0	5.1	0	0	0	0	5.5	5.5	5.5
STANDBY	0	0	0	0	0	5.4	5..4	0	0	0	0	5	5.1	0	0	0	0	5.5	5.5	5.5
Ref No.	IC2801																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	0	5.5	0	0	0	5.5	0	0	0	3.5	3.8	4.7	0	5.5	1	5.4	4.2	4.9	5.1	0
STANDBY	0	5.5	0	0	0	5.5	0	0	0	5.5	5.5	5.5	5.5	5.5	5.1	5.5	0	5.5	5.1	0
Ref No.	IC2801																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0	4.6	5.1	0	0	5.1	0	0	0	0.1	5.1	5.5	4.6	4.6	4.7	0	4.7	5.5	5.5	5.4
STANDBY	0	4.6	5.1	0	0	5.1	0	0	0	0.1	5.1	5.5	4.6	4.6	4.7	0	4.7	5.5	5.5	5.4

SCHEMATIC DIAGRAM - 7

F DECK CIRCUIT

—— : +B SIGNAL
▨▨▨ : RECORD SIGNAL LINE
▨▨▨ : PLAYBACK SIGNAL

TO B
MAIN CIRCUIT (CN2803) ON SCHEMATIC DIAGRAM-3

CN1001 (14 13 12 11 10 9 8 7 6 5 4 3 2 1)
PBL PBR AFGND RECINL RECINR +B REC_H MO+B MO GND DMT DECK1_H BP1 MOTOR

PLACKBACK HEAD (L R) — CS1001 (1 2 3 4 5)
RECORD/PLAY HEAD (L R) — ERASE HEAD — CS1002 (1 2 3 4 5)

IC1001
AN7348S-E1
P.B EQ/REC AMP/ ALC/TPS AMP

TAPE A INPUT, TAPE A INPUT, PB AMP NF, PB AMP EQ, PB AMP OUTPUT, ALC LOW CUT, REC IN, REC OUT, ALC T, HI/LO, CRO/NOR, VCC
TAPE B INPUT, TAPE B INPUT, PB AMP NF, PB AMP EQ, PB AMP OUTPUT, AB SW T, REC IN, REC OUT, REC/PB SW, AB SW, RIPPLE FILTER, OUTPUT GND

IC1004
C1AA00000612
R/P SELECT
VCC SW GND CTRL2 CTRL1

Q1003
B1AAGC000007
SWITCHING (RECH)

Q1004, Q1005
B1AAGC000007
BIAS OSCILLATOR

Q1007
B1ABCF000176
BIAS OSC CONTROL

Q1017
B1AARC000003
MOTOR SWITCH

W1002

SA-AK240E/EB/EG DECK CIRCUIT

G DECK MECHANISM CIRCUIT

IC971
CNB13030R2AU
PHOTO INTERRUPTER

S972 HALF, S971 MODE, S975 RECINH_F
D971 MA2C16500E, PL970
R972 820, R973 39K

VREF_GND HALF RECINH_R MODE RECINH_F AD_OUT STBY_5V
Z971
RGSD12A1445T

MODE D1_CRO2 PL GND PHOTO_T HALF STBY_5V VREF_GND PHOTO_S

IC951
CNB13030R2AU
PHOTO INTERRUPTER

D951 MA2C16500E, PL971
R952 820, R953 39K
S952 HALF
S951 MODE

MODE D1_CRO2 PL GND PHOTO_T HALF STBY_5V VREF_GND

PL2 PL1 STBY_5V PL_GND AD_OUT PHOTO_PB PHOTO_RP HALF_PB VREF_GND MODE_PB
CN971

TO B
MAIN CIRCUIT (CN2951) ON SCHEMATIC DIAGRAM-3

SA-AK240E/EB/EG DECK MECHANISM CIRCUIT

C5305 330P
C5302 330P
C5339 0.47
C5340 0.47
C5301 0.47
C5303 0.47
R5301 5.6K
R5303 5.6K
R5304 5.6K
W5507 0
R5302 5.6K
C5336 1000P
C5337 1000P
L5301 G0C220Z00002
R5308 10
R5307 10
C5333 220P
C5331 220P
C5330 220P
C5332 220P
C5324 0.68
R5305 22
R5306 22
C5327 0.68
C5325 0.1
C5328 0.1
C5326 0
C5329 0
C5123 35V1000
C5124 35V1000
LQ_R
AGND
HL_R
AGND
R5210 270
C5210 220P
AGND
R5514 0
F_HOP
R5201 1K
R5202 100K
C5701 6.3V100
R5204 100K
R5203 10K
C5201 470P
AGND
C5202 100P
C5203 100P
X5202 H2A375300003
R5205 100K
W5504
Q5201
R5207 6.8K
R5206 1M
Q5202
X5201 H2A415300001
C5208 6.3V680
C5204 100P
C5205 0.1
R5209 10
IC5201 C0JBAB000011 LOGIC
1A 1Y 2A 2Y 3A 3Y GND
VCC 6A 6Y 5A 5Y 4A 4Y
14 13 12 11 10 9 8
1 2 3 4 5 6 7
Q5201 B1ABCF000176 FREQUENCY HOPPING SWITCH
Q5202 B1ADCF000063 FREQUENCY HOPPING SWITCH
L5101 J0JKB0000037
L5102 J0JKB0000037
W5505 0
R5112 47K
R5113 47K
Q5103,Q5104 B1ABCF000176 FAN ON/OFF SWITCH
Q5104
Q5103
C5105 10V220
R5111 100K
C5155 1000P
R5413 100K
R5313 150K
L5601 G0B9R5K00001
C5335 0.015
C5435 0.015
L5602 G0B9R5K00001
C5343 0.015
R5317 10K
D5126 B0ACCK000005
R5150 220K
JK5101
SPEAKER
F_HOP
T_GND
MODE
+15V
HI_L
HI_R
A_GND
LO_L
LO_R
A GND
FAN
CN5102
TO B MAIN CIRCUIT (CN2809) ON SCHEMATIC DIAGRAM-3
W5506 0
PGND
FLGND
DGND
PCONT
CD8V
NC
DC_DET
STANDBY
12V
15V
-3V
SW5V
CN5103
TO B MAIN CIRCUIT (CN2808) ON SCHEMATIC DIAGRAM-3
R5151 150K
Q5111 B1BACG000023 +15V REGULATOR
R5147 2.2
R5122 0
R5123 4.7
R5125 0
C5157 0.01
R5126 1K
D5152 B0BA01900005
R5127 470
C5109 25V100
C5110 25V100
D5107 B0BA01500003
R5152 0
E5102 K4CZ01000027
W5509 0
K5101 B0EAKM000122
D5129 B0EAKM000122
Q5113 B1GDCFNA0001 CURRENT LIMITER SWITCH
Q5112 B1BCCG000002 CURRENT STABLISER
R5137 2.2
R5136 2.2
R5135 2.2
R5134 1.2K
C5159 0.01
R5133 10K
Q5113
D5125 B0AAFK000004
W5508 0
Q5114
R5132 330
C5113 50V33
D5109 B0BA01100004
Q5114 B1ABCF000176 11V REGULATOR
Q5115 B1AAKD000014 5.7 REGULATOR
R5144 12
D5128
D5124
D5123
D5128,D5124,D5123 B0EAKM000122
C5111 6.3V100
C5158 0.01
R5131 2.2K
R5130 150
C5112 25V10
D5108 B0BA5R700008
L5101 J0JKB0000037
L5102 J0JKB0000037
C5101 35V1000
C5151 100P
Q5101
D5101 B0BA01100004
C5114 0.1
C5102 100V10
D5122 B0EAKM000122
E5101 K4CZ01000027
C5107 0.1
C5187 0.1
C5171 50V1000
R5103 10K
D5121 B0EAKM000122
C5103 100V10
C5186 0.1
Q5110
Q5110 B1AACF000064 26V REGULATOR
R5101 10K
R5114 1.8
D5102 B0BA02600018
C5106 0.1
W5501 0
C5172 50V1000
E5103 K4CZ01000027
Q5101,Q5102 B1CEGM000001 CURRENT CONTROL SWITCH
Q5108 B1ABCF000176 SWITCH
Q5102
C5104 35V1000
C5153 100P
D5105
B0BA02400029
R5108 47
D5104
B0BA01100004
R5107 560
Q5108
C5152 0.1
C5115 0.1
R5106 22K
R5109 1K
Q5109 2SB0709AHL VOLTAGE REGULATOR
R5105 10K
R5110 2.2K
D5103 B0BA3R900006
+VCC1
+VCC2
-VCC1
-VCC2
AC GND
AC GND
ACIN
SUB+B
DGND
TO D TRANSFORMER CIRCUIT (CN5950) ON SCHEMATC DIAGRAM-5
H5104/W5104
2/2
SA-AK240E/EB/EG POWER CIRCUIT

SCHEMATIC DIAGRAM - 6

E POWER CIRCUIT —— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE

1/2

SA-AK240E/EB/EG POWER CIRCUIT

IC5301
C1BA00000407
2-CH DIGITAL AMP

IC5301
OSC 1, IN1+ 2, IN1- 3, VDDAT 4, SGND 5, VSSA1 6, PRBT 7, VDDP1 8, BOOT1 9, OUT1 10, VSSP1 11, STAB1 12, VSSP2 13, OUT2 14, BOOT2 15, VDDP2 16, VSSD 17, VSSA1 18, SGND 19, VDDA1 20, IN2- 21, IN2+ 22, MODE 23

Q5154
2SB0709AHL
PCONT SWITCH

R5153 100
R5154 100
Q5173
B1ABCF000176
SWITCH
R5148 5.6K
R5174 0
R5146 5.6K
C5121 50V47
Q5173
Q5153
R5139 10
W5511 0
R5138 10
C5311 220P
C5313 0.015
C5316 0.1
C5319 0.015
C5321 0.1
C5310 0.1
C5314 0.1
C5318 0.1
R5173 1K
R5149 1K
Q5153
B1ABCF000176
MODE SWITCH
AGND
MODE
C5308 0.1
C5309 0.1
C5312 0.1
C5315 0.1
C5317 0.1
C5320 0.1
C5322 0.1
C5323 0.1
C5305 330P
C5302 330P
C5339 0.47
C5340 0.47
C5301 0.47
C5303 0.47
R5301 5.6K
R5303 5.6K
R5304 5.6K
W5507 0
R5302 5.6K
C5336 1000P
C5337 1000P
LO_R
AGND
HI_R
AGND
L5301
G0C220Z00002
R5308 10
R5307 10
C5333 220P
C5331 220P
C5330 220P
C5332 220P
C5324 0.68
R5305 22
R5306 22
C5327 0.68
C5325 0.1
C5328 0.1
C5326 0
C5329 0
C5123 35V1000
C5124 35V1000
R5210 270
C5210 220P
AGND
R5514 0
F_HOP
C5701 6.3V100
R5201 1K
R5204 100K
R5202 100K
R5203 10K
C5201 470P
AGND
C5202 100P
C5203 100P
X5202
H2A375300003
R5205 100K
W5504 0
IC5201
C0JBAB000011
LOGIC
1A 1Y 2A 2Y 3A 3Y GND
VCC 6A 6Y 5A 5Y 4A 4Y
Q5201
R5207 6.8K
R5206 1M
Q5202
X5201
H2A415300001
C5208 6.3V680
C5204 100P
C5205 0.1
R5209 10
Q5201
B1ABCF000176
FREQUENCY HOPPING SWITCH
Q5202
B1ADCF000063
FREQUENCY HOPPING SWITCH
L5101
J0JKB0000037
L5102
J0JKB0000037
W5505
0
R5112 47K
R5113 47K
Q5103,Q5104
B1ABCF000176
FAN ON/OFF SWITCH
Q5104
Q5103
R5413 100K
R5313 150K
C5105 10V220
R5111 100K
C5155 1000P
R5317 10K
D5126
B0ACCK000005
R5150 220K
L5601
G0B9R5K00001
C5335 0.015
C5435 0.015
L5602
G0B9R5K00001
C5343 0.015
R+
R-
L+
L-
JK5101
SPEAKER
R5151 150K
Q5111
B1BACG000023
+15V REGULATOR
R5147 2.2
R5122 0
R5123 4.7
R5125 0
Q5101
+VCC1
+VCC2

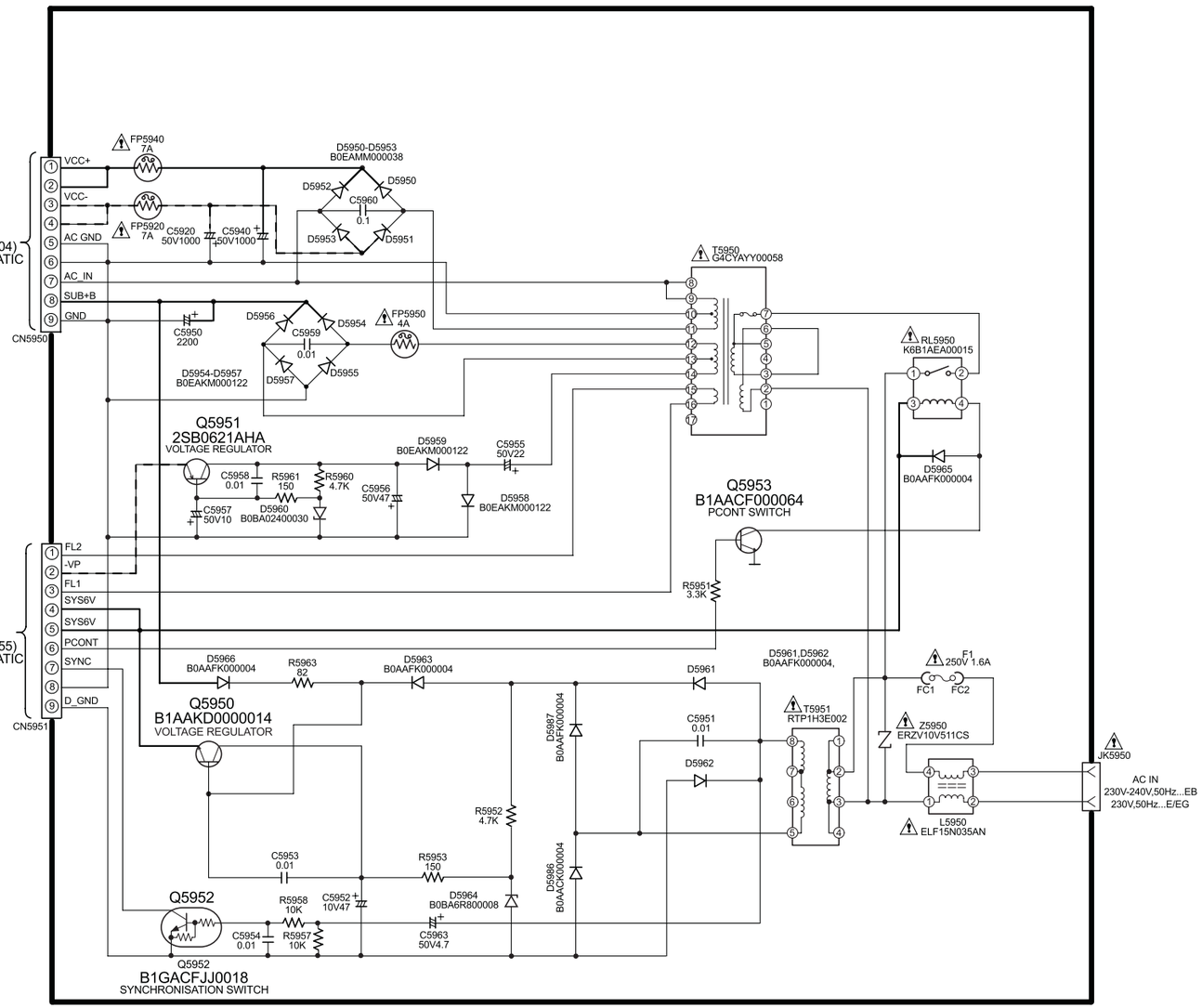
TO B MAIN CIRCUIT (CN2809) ON SCHEMATIC DIAGRAM-3

1	F_HOP	F_HOP
2	T_GND	T_GND
3	MODE	MODE
4	+15V	
5	HI_L	HI_L
6	HI_R	HI_R
7	A_GND	A_GND
8	LO_L	W5506 0 LO_L
9	LO_R	LO_R
10	A GND	

SCHEMATIC DIAGRAM - 5

D TRANSFORMER CIRCUIT

—— : +B SIGNAL LINE – – : -B SIGNAL LINE

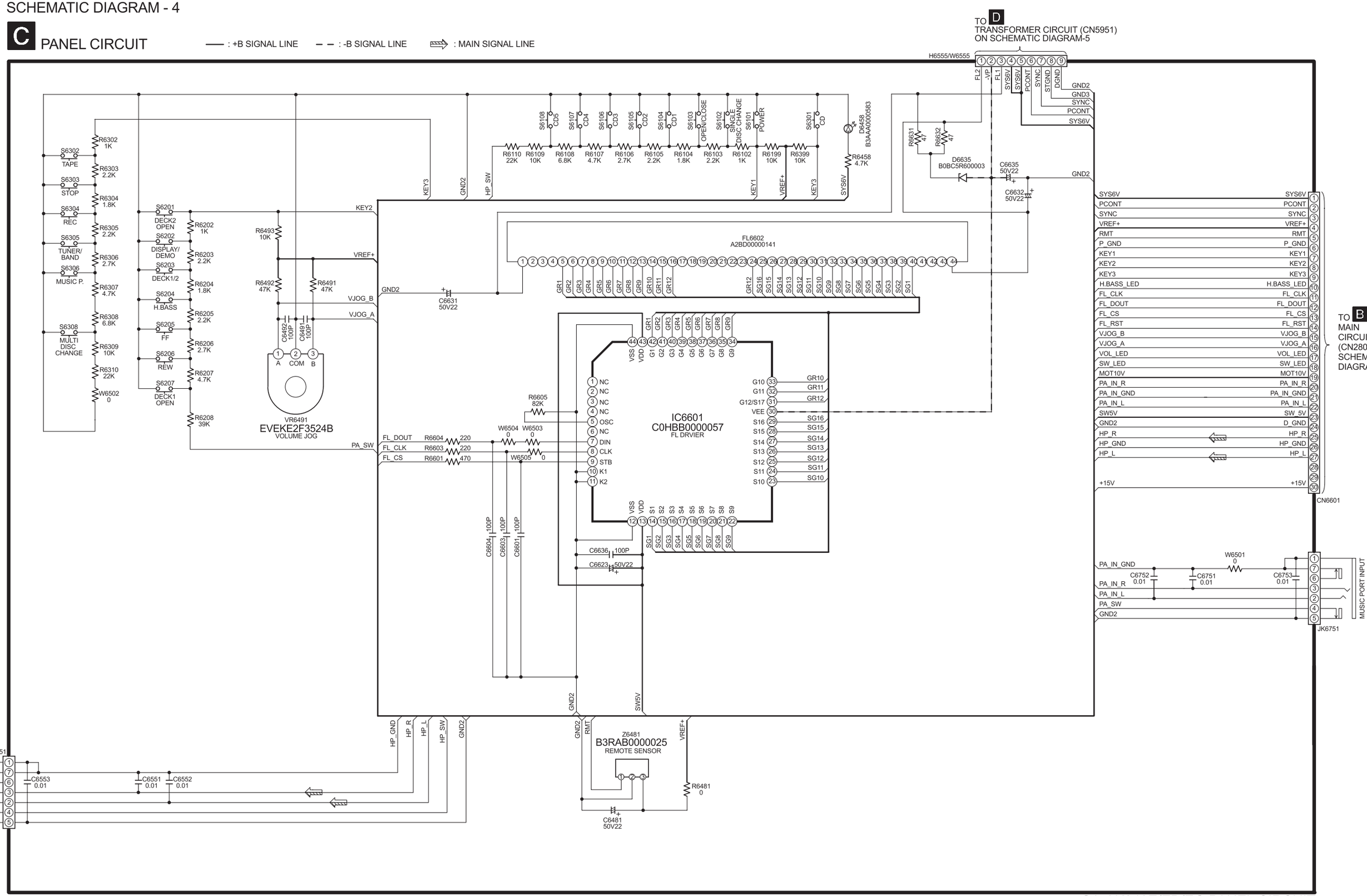


SA-AK240E/EB/EG TRANSFORMER CIRCUIT

SCHEMATIC DIAGRAM - 4

C PANEL CIRCUIT

—— : +B SIGNAL LINE – – : -B SIGNAL LINE ⇨ : MAIN SIGNAL LINE



SA-AK240E/EB/EG PANEL CIRCUIT

IC2871
E-EPROM IC
(NOT SUPPLIED)

IC2809
C0ABA000009
RDS IC

Q2942
B1ACKD000006
FAN MOTOR ON/OFF SWITCH

Q2943
B1ABCF000176
FAN SUPPLY
CONTROL SWITCH

Q2948,Q2949
B1ABCF000176
DC DETECT SWITCH

Q2803
B1GBCFJJ0051
RESET (MICRO-P) SWITCH

TO FAN
CN2810

TO E
POWER
CIRCUIT
(CN5103) ON
SCHEMATIC
DIAGRAM-6
CN2808

TO C
PANEL CIRCUIT (CN6601) ON
SCHEMATIC DIAGRAM-4
CN2806

SA-AK240E/EB/EG MAIN CIRCUIT

4/4

SA-AK240E/EB/EG MAIN CIRCUIT

3/4

IC2801
C2CBYY000053
MICROPROCESSOR

IC2871
IC2871
E-EPROM IC
(NOT SUPPLIED)

Q2901
Q2901
B1ACKD000006
CONTROL SWITCH

Q2902
Q2902
B1AACF000064
VOLTAGE STABLISER CD3.3V

Q2906
Q2906
B1ABCF000176
INTERFACE SWITCH

Q2907
Q2907
B1ABCF000176
CD STATUS INTERFACE

Q2958,Q2960
Q2958,Q2960
B1ACKD000006
PLUNGER ON/OFF SWITCH

Q2957,Q2959
Q2957,Q2959
B1GBCFLL0037
PLUNGER ON/OFF SWITCH

Q2950
Q2950
B1ACKD000006
DECK SUPPLY CONTROL SWITCH

Q2951
Q2951
B1ACKD000006
SUPPLY CONTROL SWITCH

Q2952
Q2952
B1GBCFLL0037
DECK SUPPLY (PCONT) CONTROL SWITCH

Q2936
Q2936
B1ACKD000006
CD SUPPLY CONTROL SWITCH

Q2937
Q2937
B1GBCFJJ0051
CHANGER PLUNGER ON/OFF SWITCH

Q2803
Q2803
B1GBCFJJ0051
RESET (MICRO-P) SWITCH

Q2946
B1ACKD
FAN MOTOR ON

D2901
B0ADCC000002

D2946
B0ADCJ000020

D2803
B0ACCK000005

X2801
H0A327200115

X2802
H2B100500004

TO B MAIN CIRCUIT (1B) ON SCHEMATIC DIAGRAM-2

TO B MAIN CIRCUIT (1A) ON SCHEMATIC DIAGRAM-2

TO A CD SERVO CIRCUIT (CN7002) ON SCHEMATIC DIAGRAM-1

TO G DECK MECHANISM CIRCUIT (CN971) ON SCHEMATIC DIAGRAM-7

TO CRS1 (CN1)

TO C PANEL CIRCUIT (CN6601) ON SCHEMATIC DIAGRAM-4

W2511 0
R2701 1K
C2701 0.01
C2702+ 16V100
C2705+ 50V1
R2705 3.3K
R2702 1K
R2703 220K
C2703 470P
R2315 56K
C2315 16V22
R2316 2.2K
Q2142 B1ABCF000176 AGC CONTROL SWITCH
Q2311,Q2411 B1ABGC000005 MUTING SWITCH
R2145 10K
R2146 1K
C2311 1
R2311 470
R2314 0
C2312 1
C2313 47P
C2314 10P
R2704 220K
C2704 470P
W2514 0
R2312 10K
Q2311
R2313 100K
R2355 270K
C2342 1
R2455 270K
C2442 1
R2412 10K
Q2411
R2413 100K
R2401 15K
C2411 1
R2414 0
C2412 1
R2411 470
C2413 47P
C2414 10P
C2415 16V22
R2245 1K
C2706 50V1
R2415 56K
R2706 3.3K
IC2804 C0AABB000125 OP AMP
R2317 10K
Q2317
R2318 100K
R2356 180K
C2343 0.47
W2508 0
R2456 180K
C2443 0.47
R2417 10K
Q2417
R2418 100K
R2416 2.2K
Q2317,Q2417 B1ABGC000005 MUTING SWITCH
R2329 10K
C2329 4700P
C2321 1
R2321 0
R2330 3.9K
C2330 0.22
C2436 0.22
R2436 3.9K
R2435 10K
C2431 1
C2437 4700P
C2711 16V100
C2712 50V0.01
R2433 15K
R2431 0
W2512 0
C2433 1
R2434 0
W2510 0
C2325 50V1
R2326 0
R2328 15K
R2430 0
R2437 15K
C2943 50V2.2
F_HOP
T-GND
MUTE-D-AMP
+15V
HIGH_L-IN
HIGH_R-IN
ASP_GND
LOW_L-IN
LOW_R-IN
A_GND
FAN
CN2809
TO E POWER CIRCUIT (CN5102) ON SCHEMATIC DIAGRAM-6

Q2242 B1ABCF000176 AGC CONTROL SWITCH
R2246 1K
D2241 B0ACCK000005
R2149 3.3K
R2249 3.3K
R2247 100K
C2245 16V10
R2248 6.8K
Q2511 B1GDCFJJ0047 MUTING CONTROL
D2583 B0BC9R000008
C2583 16V100
C2588 0.1
R2273 4.7K
R2271 15K
R2509 560
R2510 220
C2585 220P
R2585 330K
C2584 220P
W2513 0
W2531 0
Q2341,Q2441 B1ABGC000005 HEADPHONE MUTING
R2342 33
R2341 27
R2352 27
R2351 33
R2344 33
R2343 27
R2354 27
R2353 33
Q2341
R2347 1
R2346 3.3K
R2345 1.5K
R2357 100K
C2344 0.47
C2341 1000P
W2530 0
R2457 100K
C2444 0.47
C2441 1000P
R2445 1.5K
R2446 3.3K
Q2441
R2442 33
R2441 27
R2452 27
R2451 33
R2444 33
R2443 27
R2454 27
R2453 33
R2447 1
Q2511
R2511 2.2K
R2512 100K
C2511 50V2.2
R2584 330K
R2586 1.2K
R2587 1.2K
W2546 0
W2526 0
SW15V
ASP_CLK
ASP_DA
+15V
MUTE_A
-9V
A_GND
HP_L
HP_R
+15V
F_HOP

SCHEMATIC DIAGRAM - 3

B MAIN CIRCUIT

—— : +B SIGNAL ⇒ : FM/AM SIGNAL LINE ⇒ : TAPE RECORD SIGNAL LINE ⇒ : CD SIGNAL LINE

– – : -B SIGNAL ⇒ : MAIN SIGNAL LINE ⇒ : TAPE PLAYBACK SIGNAL LINE

1/4

SA-AK240E/EB/EG MAIN CIRCUIT

IC2803
C1BB00001121
AUDIO SOUND PROCESSOR

IC2804
C0AABB000010
OP AMP

Q2142
B1ABCF000176
AGC CONTROL SWITCH

Q2311,Q2411
B1ABGC000005
MUTING SWITCH

Q2311

Q2411

Q2242
B1ABCF000176
AGC CONTROL SWITCH

Q2511
B1GDCFJJ0047
MUTING CONTROL

Q2341,Q2441
B1ABGC000005
HEADPHONE MUTING

Q2341

Q2441

Q2978
B1GDCFJJ0047
REC:ON/OFF CONTROL SWITCH

Q2980
B1GDCFJJ0047
SUPPLY CONTROL SWITCH
(DECK MOTOR)

D2583
B0BC9R000008

D2241
B0ACCK000005

D2191
B0ACCK000005

F TO DECK CIRCUIT (CN1001) ON SCHEMATIC DIAGRAM-7

CN2803

PB_L, PB_R, GND, REC_IN_L, REC_IN_R, +B, REC_H, MO+B, MO_GND, NC, DECK1_H, NC, MOTOR, NC

IN-L1, IN-R1, IN-L2, IN-R2, IN-L3, IN-R3, IN-L4, IN-R4, IN-L5, IN-R5, IN-L6, IN-R6, GND, REF-IN

OP-IN, OP-OUT, SV_OUT-L, REC-L, PRE-VIN-L, SUR1, SUR2, TRE-L, MID-L1, MID-L2, BASS-L1, BASS-L2, T-OUT-L, POST-VM-L

L-OUT, NC, DATA, CLK, VCC, R-OUT, POST-VM-R, T-OUT-R, BASS-R2, BASS-R1, MID-R2, MID-R1, TRE-R, NC

REF-OUT, GV-OUT-R, REC_L, PRE-VIN-R, HB-MIX-IN, HB-MIX-OUT, HB-FLT-OUT, HARMIN, HARMOUT, HB-ATT-IN, HB-ATT-OUT, HB-LPF-IN, HB-LPF-OUT, NC

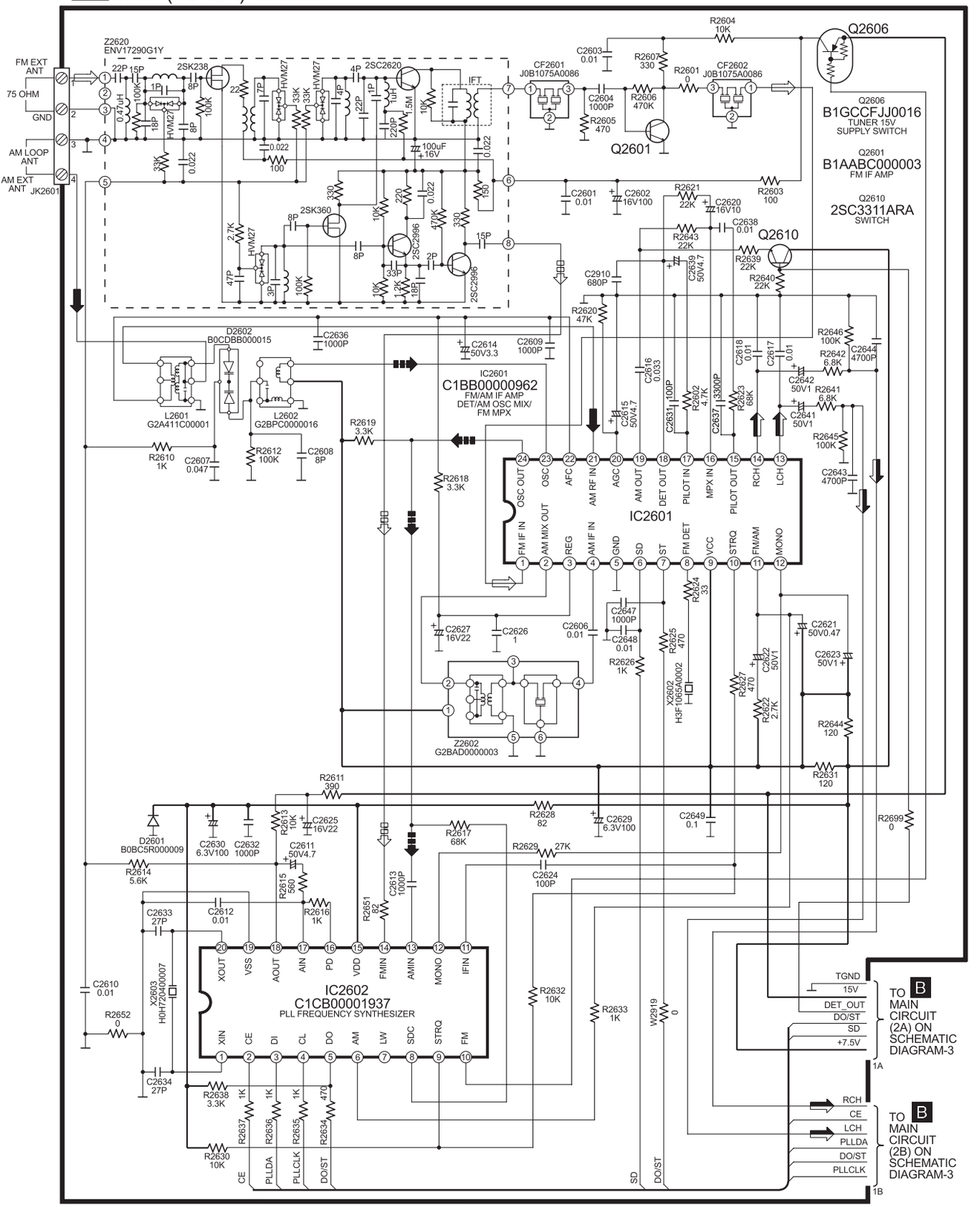
+15V, MOT_12V, P_GND, REC[59], SW5V, MTR[58], DECK_H

SW15V, ASP_CLK, ASP_DA, +15V, MUTE_A, -9V, A_GND, HP_L, HP_R

SCHEMATIC DIAGRAM - 2

B MAIN (TUNER) CIRCUIT

: +B SIGNAL LINE
: FM/AM SIGNAL LINE
: FM SIGNAL LINE
: FM OSC SIGNAL LINE
: AM SIGNAL LINE
: AM OSC SIGNAL LINE



SA-AK240E/EB/EG MAIN (TUNER) CIRCUIT

SCHEMATIC DIAGRAM - 1

OPTICAL PICKUP CIRCUIT

A CD SERVO CIRCUIT

—— : +B SIGNAL LINE ▶▶ : CD-DA SIGNAL LINE ▶▶ : CD SIGNAL LINE

LASER DIODE

CP701

CN7001

Q7601
B1ADCF000001
LASER POWER DRIVE

IC7001
MN6627954MA
SERVO PROCESSOR/
DIGITAL SIGNAL PROCESSOR/
DIGITAL FILTER D/A CONVERTER

IC7002
BA5948FPE2
4 CH DRIVE

M7301
TRV
MOTOR

M7302
SRL MOTOR

X7201
H2B169500005

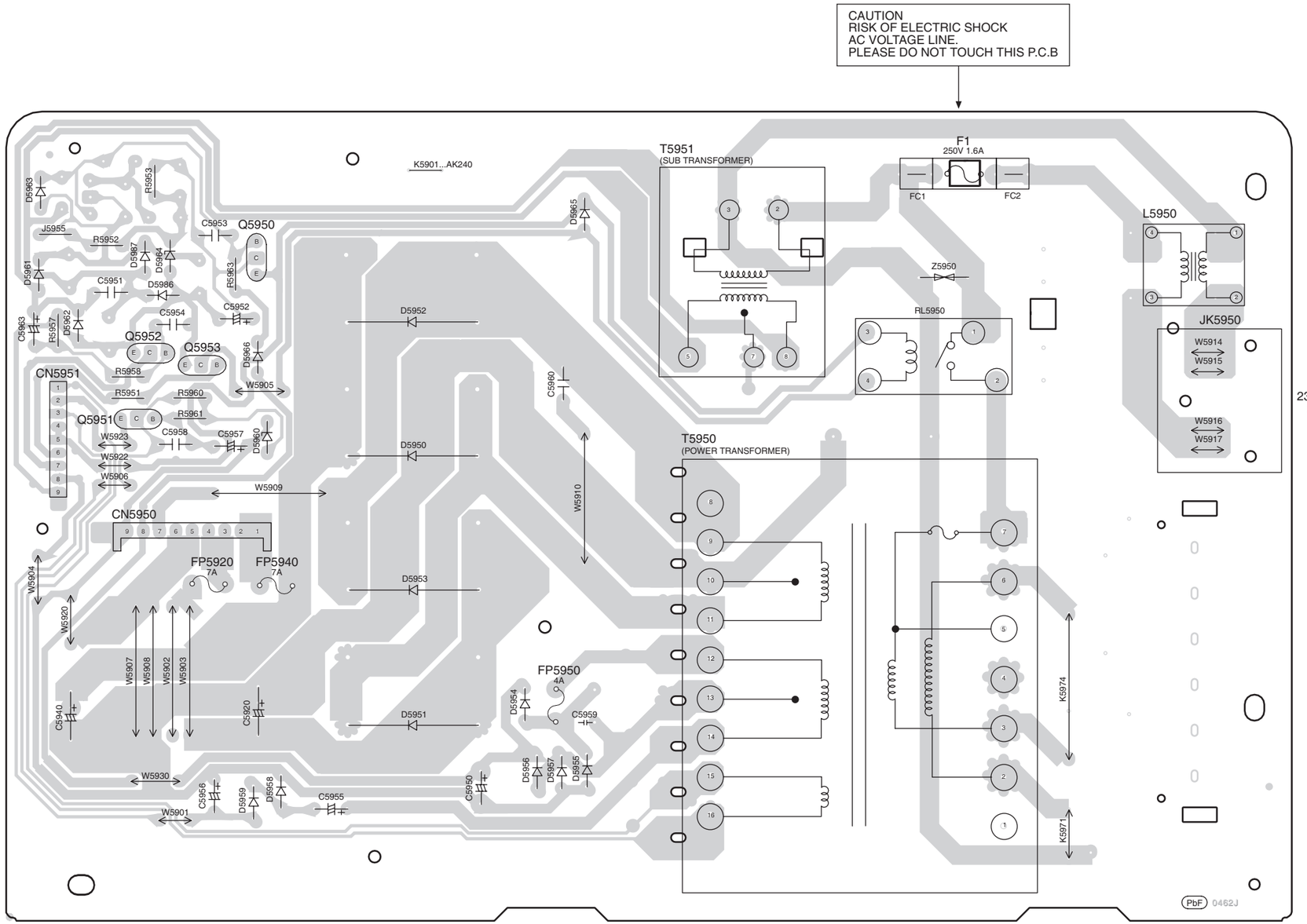
S7201
REST SW

CN7002

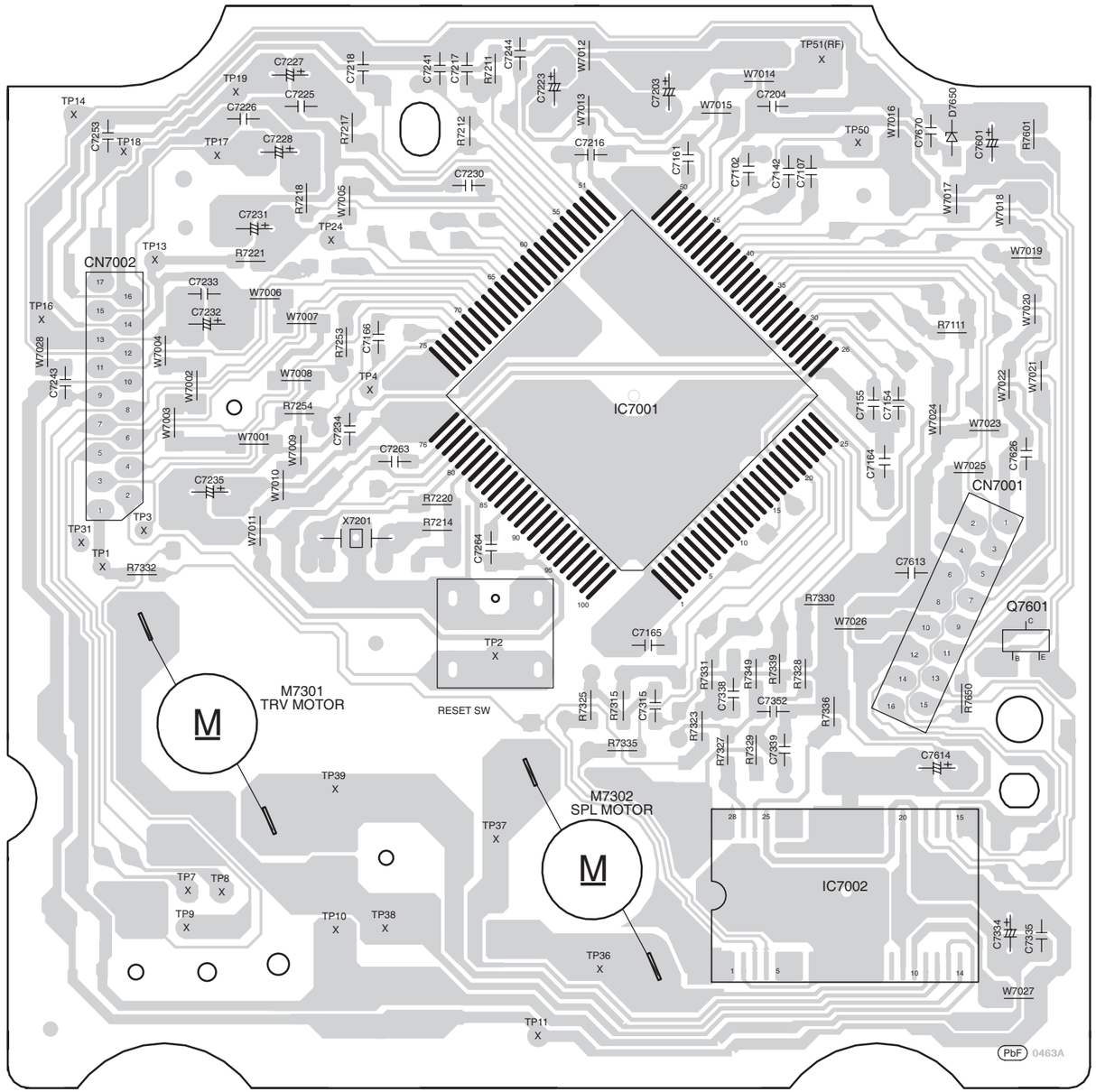
TO B MAIN CIRCUIT (CN2801) ON SCHEMATIC DIAGRAM-3

SA-AK240E/EB/EG CD SERVO CIRCUIT

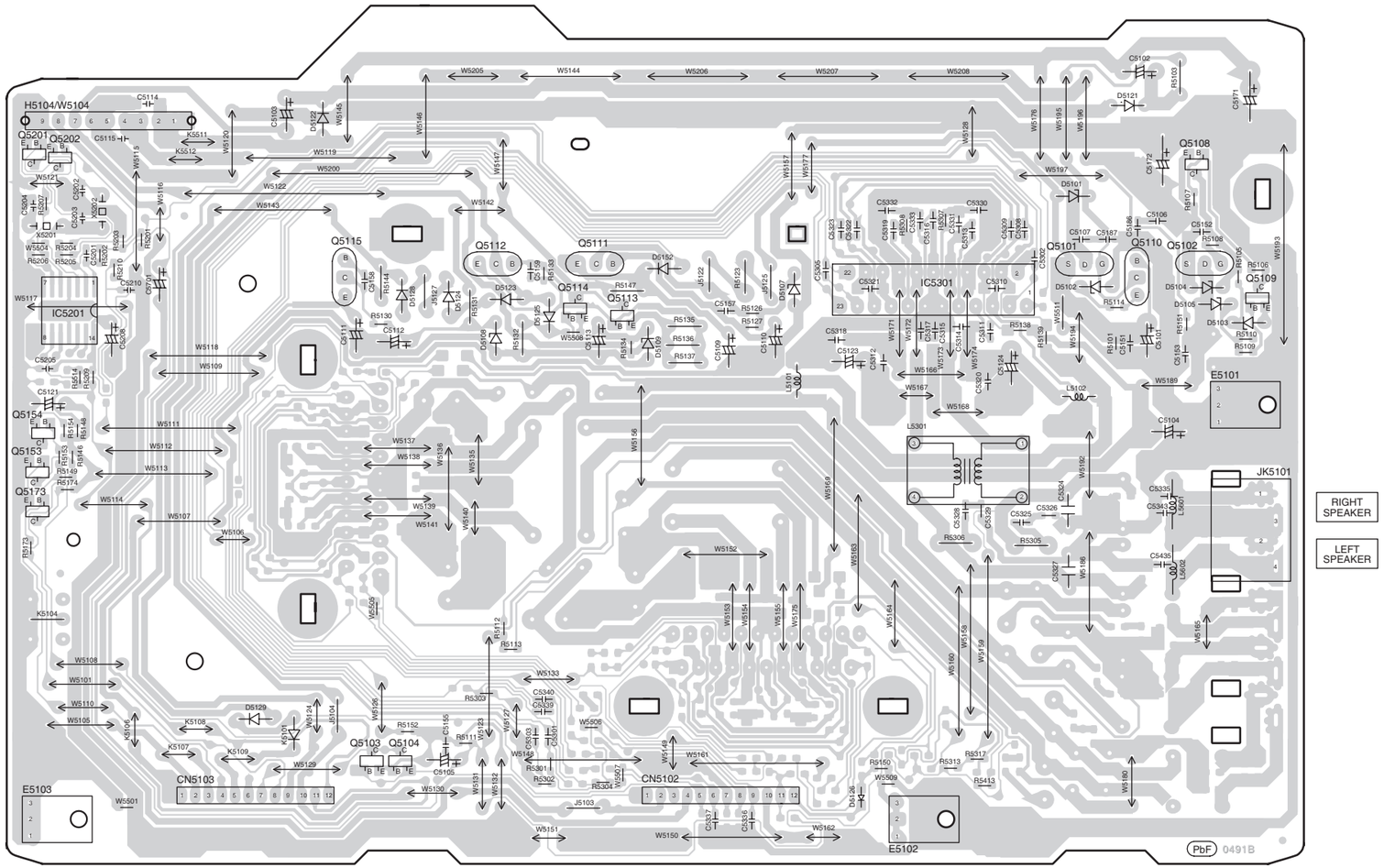
D TRANSFORMER P.C.B (REPX0518K)



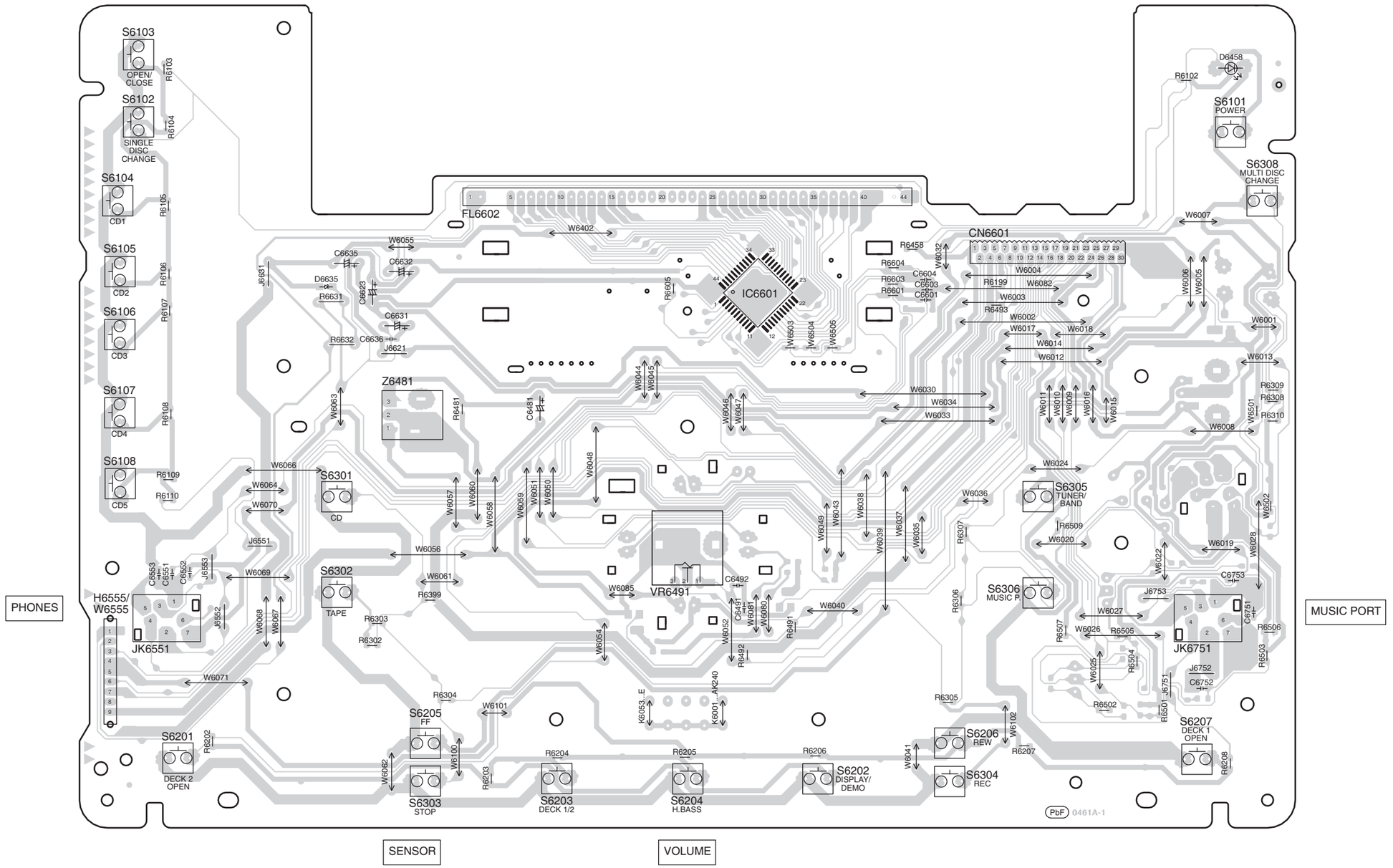
A CD SERVO P.C.B (REPX0494A)



E POWER P.C.B (REPX0533B)



C PANEL P.C.B (REPX0517N)



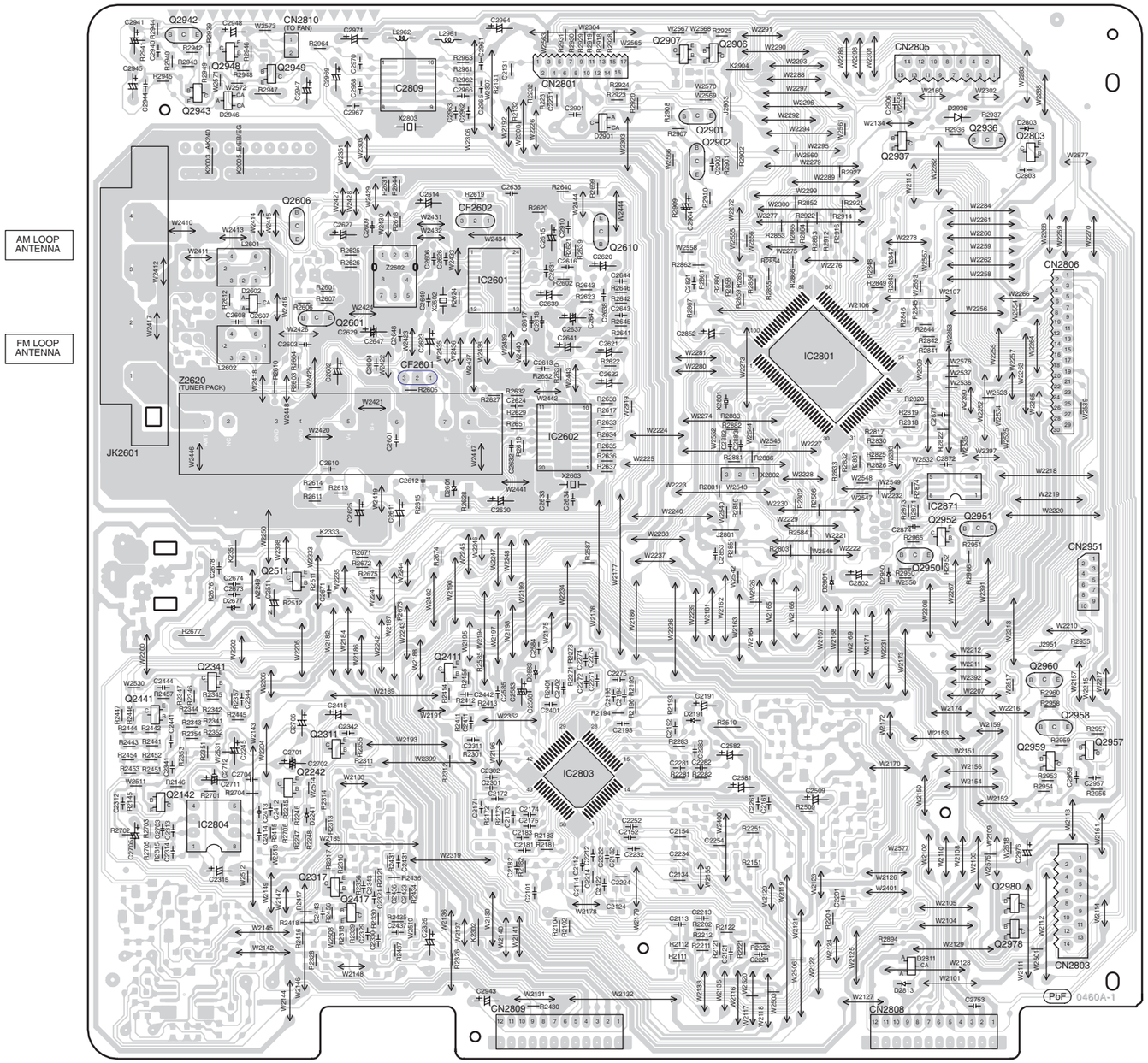
PHONES

SENSOR

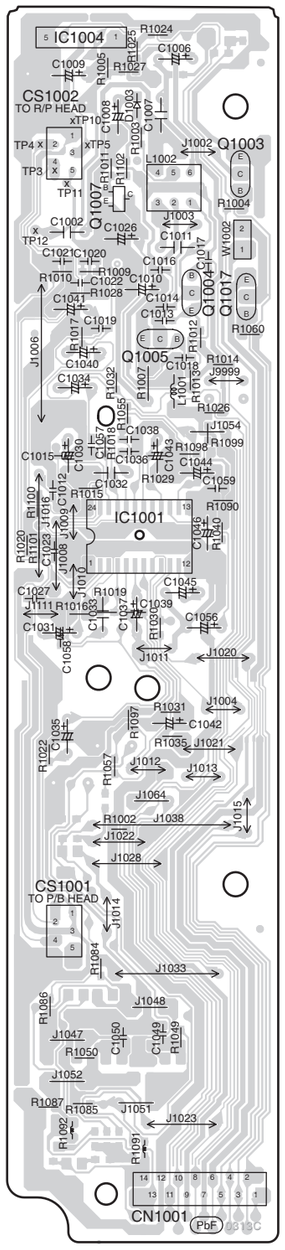
VOLUME

MUSIC PORT

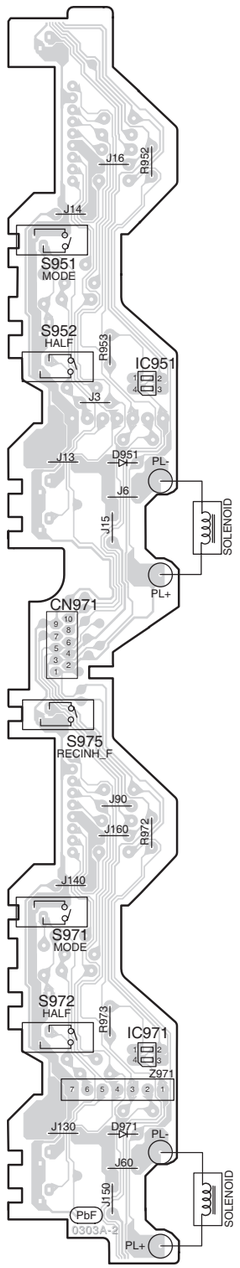
B MAIN P.C.B (REPX0516N)



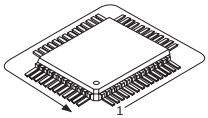
F DECK P.C.B (REPX0331G)



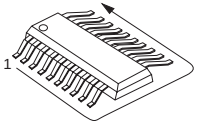
G DECK MECHANISM P.C.B. (REPX0321A)



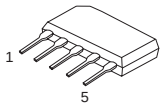
C1BB00001121 (100P)
C2CBYY000053 (100P)
C0HBB0000057 (44P)
MN6627954MA (100P)



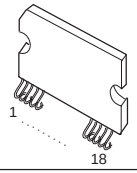
AN7348S-E1 (24P)
C0JBAB000011 (14P)
C1BB00000962 (24P)
C1BB00000987 (16P)
C1CB00001937 (20P)



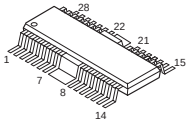
C1AA00000612



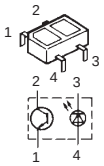
C1BA00000407



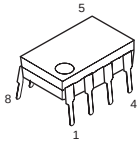
BA5948FPE2



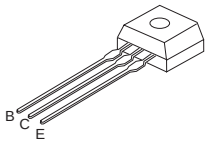
CNB13030R2AU (4P)



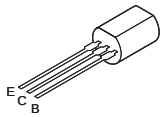
C0AABB000125



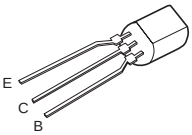
B1GCCFJJ0016
B1GACFJJ0018



B1AAKD000014
B1AARC000003
B1ACKD000006

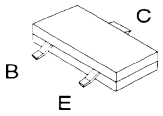


2SB0621AHA

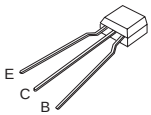


2SB0709AHL
B1ABCF000176
B1ABGC000005
B1ADCF000063
B1GBCFJJ0051
B1GDCFNA0001
B1GBCFLL0037

B1ADCF000001
B1GDCFJJ0047



2SC3311ARA



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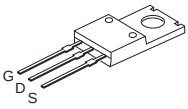

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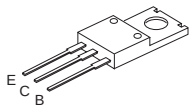

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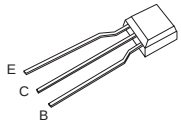

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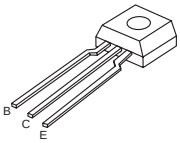

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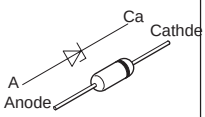

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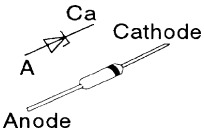

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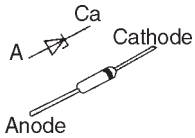

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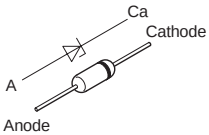
B0BA5R700008
B0BA02400029
B0BA02400030



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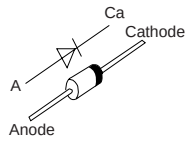

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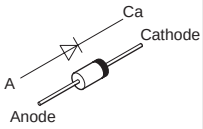

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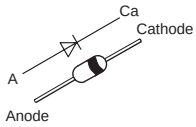

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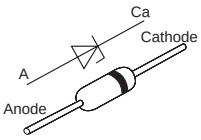

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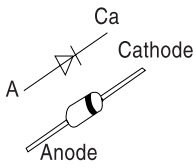

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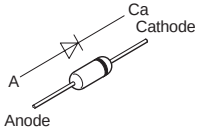
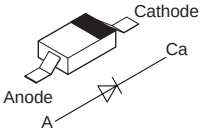


MAZ80560ML



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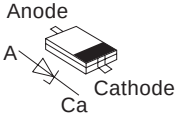

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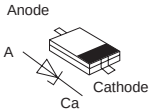
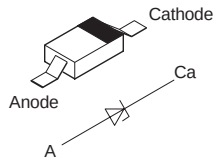
B0BC5R000009



B0BC9R000008



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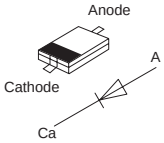

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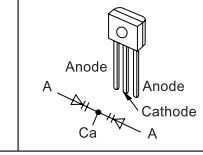
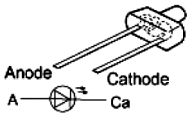


B3AAA0000583



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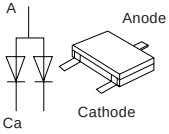

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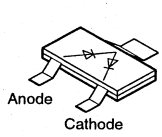


NOTE on CDs

- This unit can access up to 99 tracks.
- Choose disc with this mark.

COMPACT disc DIGITAL AUDIO

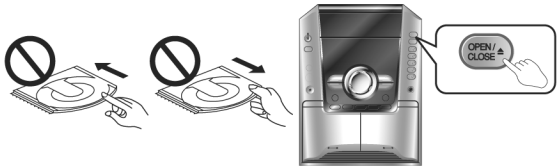
- This unit can play MP3 or WMA files and CD-DA format audio CD-R/RW that have been finalized.
- It may not be able to play some CD-R/RW due to the condition of the recording.
- Do not use irregularly shaped disc.
- Do not use disc with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
- Do not attach extra labels or stickers on the disc.
- Do not write anything on the disc.

Using DualDiscs

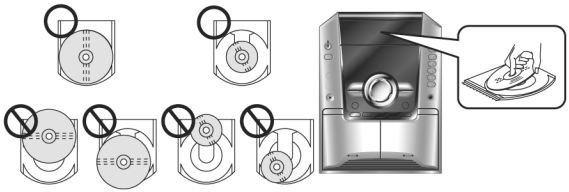
The "CD" sides of DualDiscs do not meet the CD-DA standard so it may not be possible to play them on this unit.

Not doing the following will cause damage to the unit.

- Press [⏻/I, POWER] to turn off the unit and remove the power plug only after all the displays have disappeared.



- Always press [⏏, OPEN/CLOSE] to insert or remove a disc.
- Do not push or pull out the tray by hand as this will cause an accident.



- Place the disc correctly label-up as shown in the diagram.
- Insert one disc into the tray.

NOTE on MP3 or WMA

- Files are treated as tracks and folders are treated as albums.
- This unit can access up to 999 tracks, 255 albums and 20 sessions.
- Disc must conform to ISO9660 level 1 or 2 (except for extended formats).
- To play in a certain order, prefix the folder and file names with 3-digits numbers in the order you want to play them.

MP3

When "NOT MP3/ERROR1" appears on the display, an unsupported MP3 format is being played. The unit will skip that track and play the next one.

WMA

- Noise may occur when playing WMA files.
- This unit cannot play WMA files that are copy protected.

Limitations on MP3 or WMA play

- If you have recorded MP3 or WMA on the same disc as CD-DA, only the format recorded in the first session can be played.
- Some MP3 or WMA may not be played due to the condition of the disc or recording.
- Due to differences and variations of WMA tags, some files may not play or display the tags' information properly.
- Recordings will not necessarily be played in the order you recorded them.

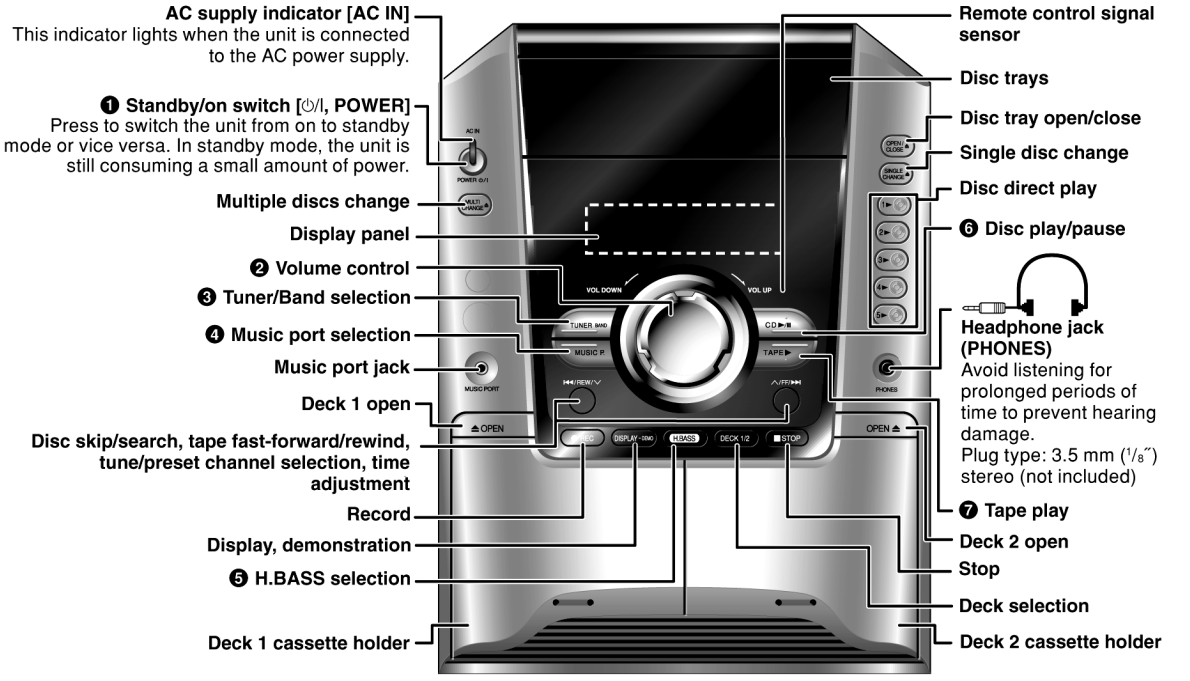
MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

Windows Media, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

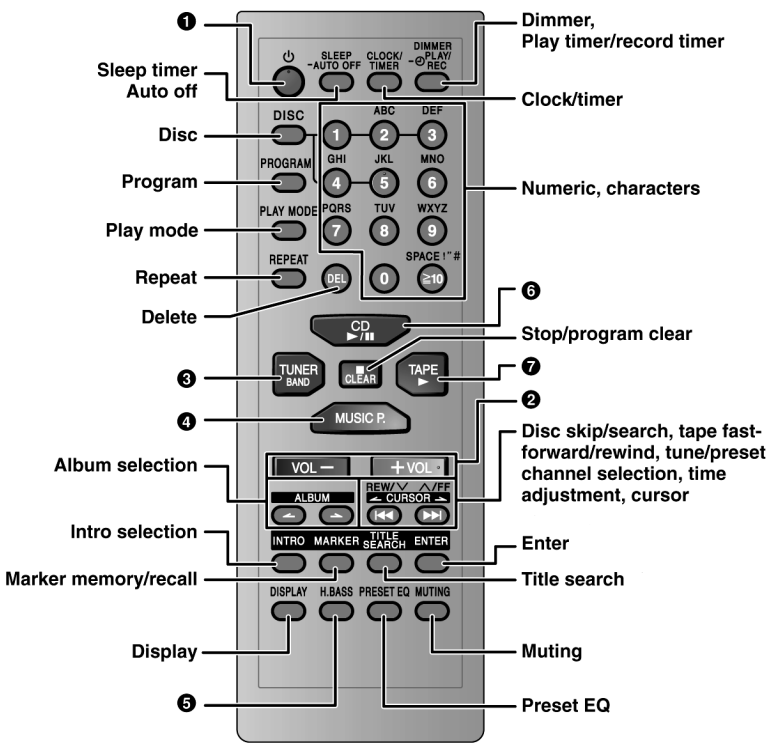
Designed for Windows Media™

Main unit



Remote control

Buttons such as ❶ function the same as the controls on the main unit.



SLEEP -AUTO OFF

This auto off function allows you to turn off the unit in **disc or tape** mode only after left unused for 10 minutes.

- Press and hold [–AUTO OFF] to activate the function.
- Press and hold [–AUTO OFF] again to cancel.
- The setting is maintained even if the unit is turned off.

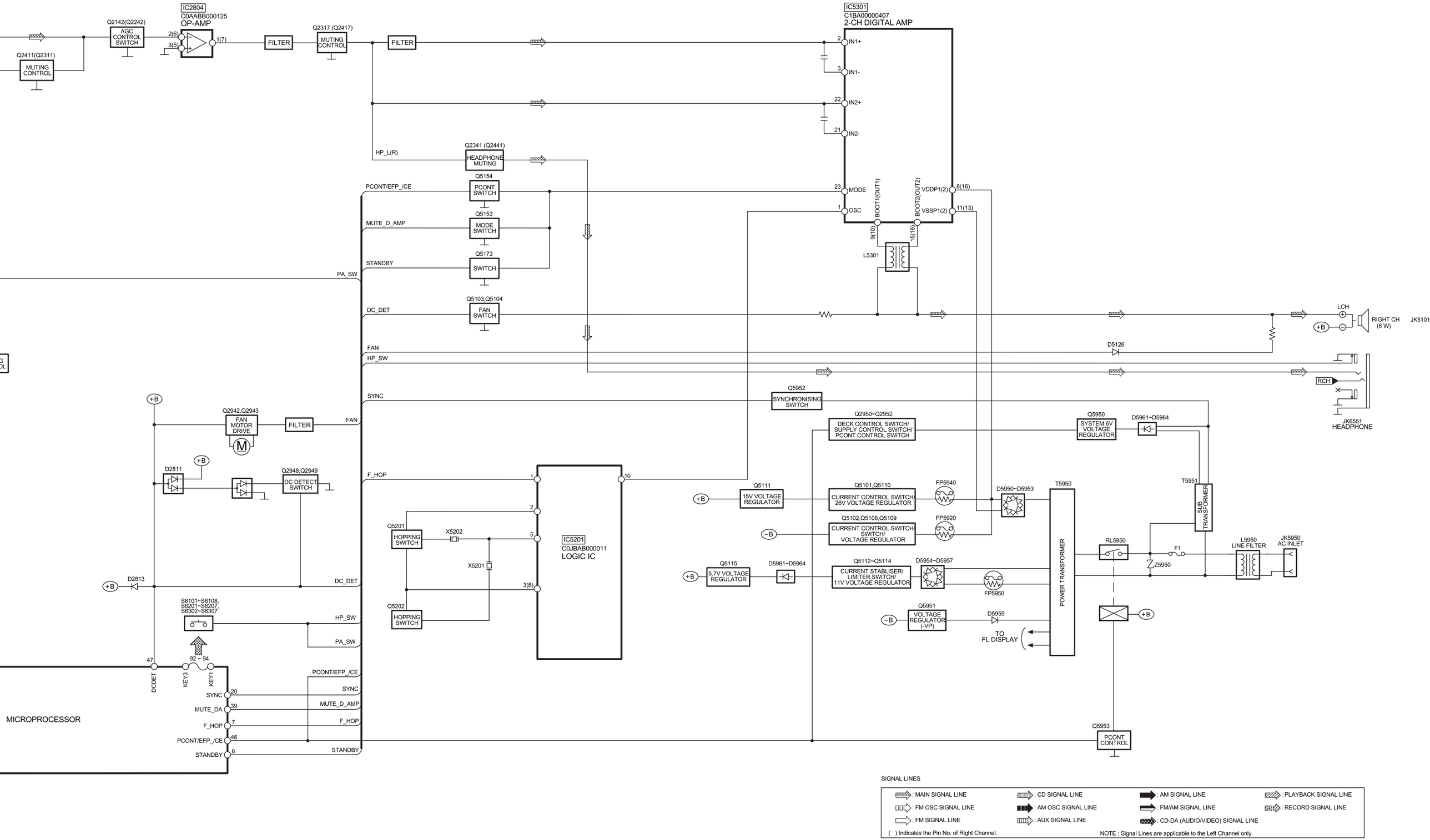
DIMMER -PLAY/ REC

To dim the display panel.

MUTING

To mute the sound.

- Press the button to activate.
- Press again to cancel.


IC2804
C0AABB000125
OP-AMP
Q2142(Q2242)
AGC CONTROL SWITCH
Q2411(Q2311)
MUTING CONTROL
FILTER
Q2317 (Q2417)
MUTING CONTROL
FILTER
IC5301
C1BA00000407
2-CH DIGITAL AMP
IN1+
IN1-
IN2+
IN2-
MODE
OSC
BOOT1(OUT1)
BOOT2(OUT2)
VDDP1(2)
VSSP1(2)
L5301
HP_L(R)
Q2341 (Q2441)
HEADPHONE MUTING
PCONT/EFP_/CE
Q5154
PCONT SWITCH
MUTE_D_AMP
Q5153
MODE SWITCH
STANDBY
Q5173
SWITCH
PA_SW
DC_DET
Q5103,Q5104
FAN SWITCH
FAN
HP_SW
SYNC
Q5952
SYNCHRONISING SWITCH
LCH
RIGHT CH (6 W)
JK5101
D5126
RCH
JK6551
HEADPHONE
Q2942,Q2943
FAN MOTOR DRIVE
FILTER
D2811
Q2948,Q2949
DC DETECT SWITCH
D2813
S6101~S6108, S6201~S6207, S6302~S6307
92 ~ 94
F_HOP
Q5201
HOPPING SWITCH
X5202
X5201
Q5202
HOPPING SWITCH
IC5201
C0JBAB000011
LOGIC IC
Q2950~Q2952
DECK CONTROL SWITCH/ SUPPLY CONTROL SWITCH/ PCONT CONTROL SWITCH
Q5950
SYSTEM 6V VOLTAGE REGULATOR
D5961~D5964
Q5111
15V VOLTAGE REGULATOR
Q5101,Q5110
CURRENT CONTROL SWITCH/ 26V VOLTAGE REGULATOR
FP5940
D5950~D5953
T5950
T5951
SUB TRANSFORMER
Q5102,Q5108,Q5109
CURRENT CONTROL SWITCH/ SWITCH/ VOLTAGE REGULATOR
FP5920
Q5115
5.7V VOLTAGE REGULATOR
D5961~D5964
Q5112~Q5114
CURRENT STABLISER/ LIMITER SWITCH/ 11V VOLTAGE REGULATOR
D5954~D5957
FP5950
POWER TRANSFORMER
RL5950
F1
Z5950
L5950
LINE FILTER
JK5950
AC INLET
Q5951
VOLTAGE REGULATOR (-VP)
D5959
TO FL DISPLAY
Q5953
PCONT CONTROL
MICROPROCESSOR
DCDET
KEY3
KEY1
SYNC
MUTE_DA
F_HOP
PCONT/EFP_/CE
STANDBY
SIGNAL LINES
: MAIN SIGNAL LINE
: CD SIGNAL LINE
: AM SIGNAL LINE
: PLAYBACK SIGNAL LINE
: FM OSC SIGNAL LINE
: AM OSC SIGNAL LINE
: FM/AM SIGNAL LINE
: RECORD SIGNAL LINE
: FM SIGNAL LINE
: AUX SIGNAL LINE
: CD-DA (AUDIO/VIDEO) SIGNAL LINE
( ) Indicates the Pin No. of Right Channel.
NOTE : Signal Lines are applicable to the Left Channel only.

FROM POWER TRANSFORMER

IC1001
AN7348S-E1
P.B EQ/REC AMP/
ALC/TPS AMP

(DECK 1) P.B. HEAD
LCH
(DECK 2) R/P HEAD
LCH
24(23)
1(2)
22(3)
21(4)
17(8)
20(5)
18(7)
6
19
15
12
LOGIC L/H
ALC
NOR/CrO & HI/LO LOGIC
LOGIC REC/PB
RIPPLE REJECTION
10
16
14
13
9
11

(DECK 2) ERASE HEAD
L1002
+B
BIAS OSC CONTROL
Q1004, Q1005, Q1007
Q1003
SWITCHING (BEAT PROOF/ RECH)
Q2978
CONTROL SWITCH

IC1004
C1AA00000612
ANALOG SWITCH
4
2
3
5

IC2803
C1BB00001121
AUDIO SOUND PROCESSOR
3(4) IN-L2(R2)
1(2) IN-L1(R1)
53(17) REC-L(R)
54(16) GV-OUT-L(R)
9(10) IN-L5(R5)
5(6) IN-L3(R3)
7(8) IN_L4(R4)
DATA 40
CLK 39
L-OUT(R-OUT) 42(37)

JK2801 AUX
CD SIGNAL
RCH
JK6751 MUSIC PORT INPUT

Q2411(Q2311) MUTING CONTROL
Q2142(Q2242) AGC CONTROL SWITCH
IC2804
C0AABB000125
OP-AMP
2(6)
3(5)
1(7)
FILTER
Q2317 (Q

Q2501 METER CONTROL SWITCH
Q2511 MUTING CONTROL
−B

Q1017 MOTOR SWITCH
M1002
Q2980 DECK MOTOR SWITCH
+B

IC951
CNB13030R2AU
PHOTO INTERRUPTER
MODE
HALF
S951
S952
IC971
CNB13030R2AU
PHOTO INTERRUPTER
HALF
MODE
RECINH_F
S972
S971
S975
Z971 INTERFACE

Q2959,Q2960 PLUNGER SUPPLY SWITCH/ PLUNGER:ON/OFF SWITCH
D951
Q2957,Q2958 PLUNGER SUPPLY SWITCH/ PLUNGER:ON/OFF SWITCH
D971
IC2871
E-EPROM
(NOT SUPPLIED)
D2503

+B
Q2942,Q2943 FAN MOTOR DRIVE
FILTER
D2811
Q2948,Q2949 DC DETECT SWITCH
D2813
S6101~S6108, S6201~S6207, S6302~S6307
92 ~ 94

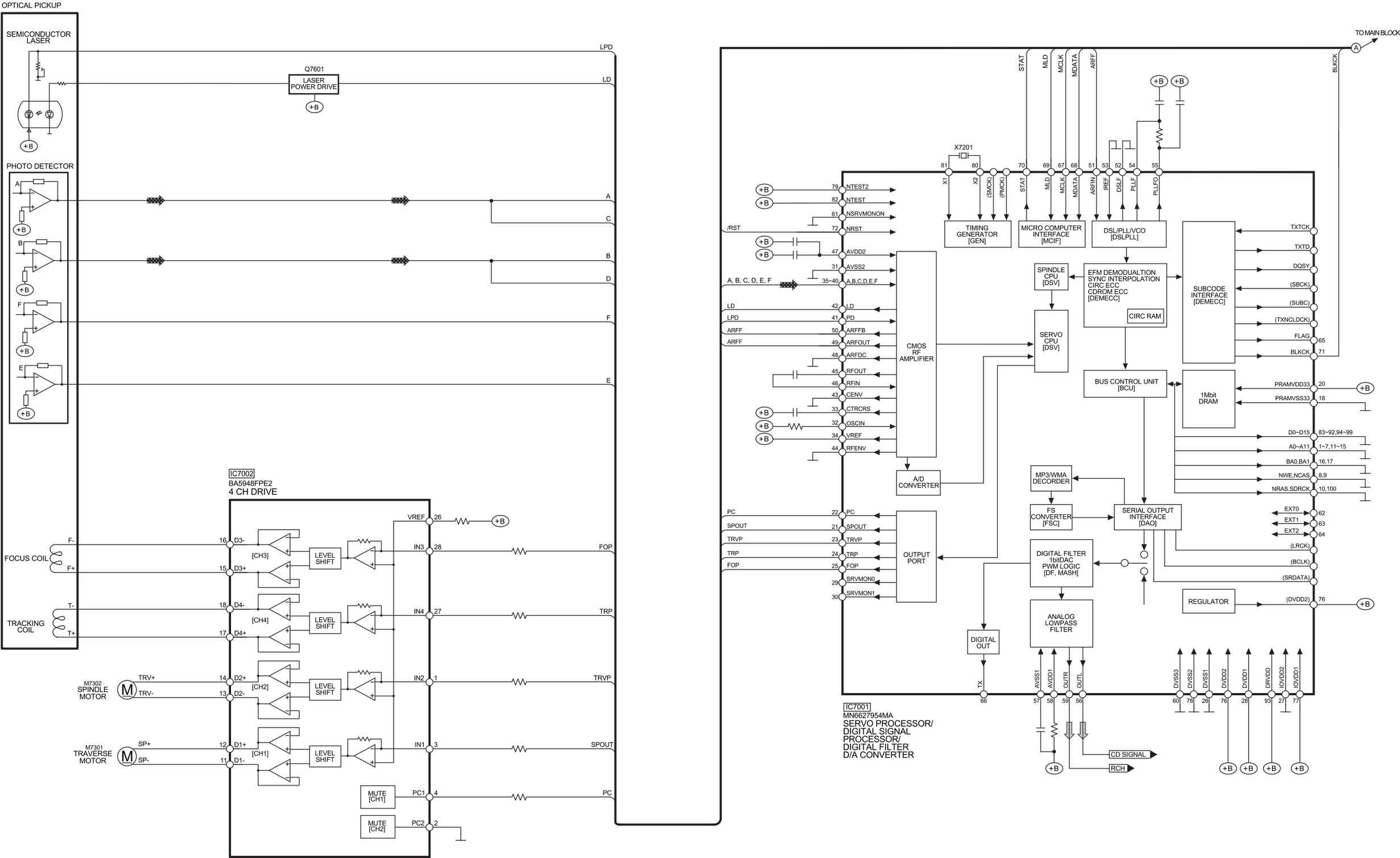
53 MODE_1
52 HALF_1
97 PHOTO_1
91 DECK2
95 PHOTO_2
58 MTR
59 REC
60 DECK1_H
56 PLG1
57 PLG2
43 EE_DAT
42 EE_CLK
41 EE_CS
1 LM_1
26 ASP_DAT
27 ASP_CLK
40 MUTE_A
47 DCDET
KEY3
KEY1
20 SYNC
39 MUTE_DA
7 F_HOP
46 PCONT/EFP_/CE
6 STANDBY
PCONT/E
MUTE

C2CBYY000053 IC2801 MICROPROCESSOR

C2CBYY000053 IC2801 MICROPROCESSOR

66 VOL_LED
D6457, D6462
QR6457
LED DRIVE
18 RMT
Z6481 REMOTE SENSOR

FMANT
Z2620
Q1 (RFAMP)
Q2
MIXER
Q3
OSC
Q4
BUFFER
CF2601
Q2601
FM IF AMP
CF2602
AMANT
L2601
D2602
L2602
+B
+B (FM)
RCH
ALC
AM OSC
BUFFER
AM MIX
AM RMAMP
DECODER
PHASE DET
PILOT CANCEL
STEREO SWITCH
AGC
LEVEL DET
S-CURVE
FM IF
FM DET
AM/FM IF BUFFER
AM IF
AM DET
COMP
TUNING DRIVE
VCO
FF
PILOT DET
REG
SD
ST
IC2601
C1BB00000962
FM/AM IF AMP, DET/AM OSC, MIX/FM MPX
Z2602
AM IFT
X2602
ST/DO
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
X2603
UNLOCK DETECTOR
SWALLOW COUNTER 1/6,1/17,4 BITS
12 BITS PROGRAMMABLE DIVIDER
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
C2B I/F
POWER ON RESET
DO
CE
DI
CL
PLLDA
PLLCLK
Q2606
TUNER 15V SUPPLY SWITCH
IC2602
C1CB00001937
PLL FREQUENCY SYNTHESIZER
TO CD DRIVE BLOCK
FL6602
FL DISPLAY
FROM POWER TRANSFORMER
GR1
GR12
31~42
SG1
SG16
14~22, 23~29
5~16,24
FL10
FL24
25~40
FL25
FL40
IC6601
C0HBB0000057
FL DRIVER
STB
DIN
CLK
IC1004
C1AA00000612
ANALOG SWITCH
(DECK 1) P.B. HEAD
(DECK 2) R/P HEAD
LCH
(DECK 2) ERASE HEAD
L1002
Q1003
SWITCHING (BEAT PROOF/ RECH)
/RST
STAT
Q2907
CD STATUS INTERFACE
PLLCLK
BLKCK
Q2906
BLKCK INTERFACE SWITCH
SD
MLD
MDATA
MCLK
CE
PLLCE
TO CD LOADING CIRCUIT
HOME_SW
SPEED
CLOSE_SW
OPEN_SW
CHG_CW
CHG_CCW
ST_SW
PLAY_SW
BOTTOM_SW
UP_SENSOR
C2CBYY000053
IC2801
MICROPROCESSOR
RESTSW
S7201 RESET SWITCH
V_JOG_A
V_JOG_B
VR6491 JOG VOL
XC_IN
XC_OUT
X2801
X_OUT
X_IN
X2802
VOL_LED
D6457, D6462
QR6457
LED DRIVE
IC2809
C0ABA000009
RDS IC
RDS_DA
RDS_CLK
MODE_1
HALF_1
S951
S952
IC951
CNB13030R2AU
PHOTO INTERRUPTER
PHOTO_1
S972
S971
S975
HALF
MODE
RECINH_F
Z971 INTERFACE
DECK2
Q1017
MOTOR SWITCH
M1002
Q2980
DECK MOTOR SWITCH


OPTICAL PICKUP
SEMICONDUCTOR LASER
PHOTO DETECTOR
Q7601
LASER POWER DRIVE
LPD
LD
A
C
B
D
F
E
IC7002
BA5948FPE2
4 CH DRIVE
FOCUS COIL
TRACKING COIL
M7302
SPINDLE MOTOR
M7301
TRAVERSE MOTOR
TRV+
TRV-
SP+
SP-
[CH3]
[CH4]
[CH2]
[CH1]
LEVEL SHIFT
VREF
IN3
IN4
IN2
IN1
FOP
TRP
TRVP
SPOUT
MUTE [CH1]
MUTE [CH2]
PC1
PC2
PC
TO MAIN BLOCK
X7201
TIMING GENERATOR [GEN]
MICRO COMPUTER INTERFACE [MCIF]
DSL/PLL/VCO [DSLPLL]
CMOS RF AMPLIFIER
A/D CONVERTER
OUTPUT PORT
SPINDLE CPU [DSV]
SERVO CPU [DSV]
EFM DEMODUALTION SYNC INTERPOLATION CIRC ECC CDROM ECC [DEMECC]
CIRC RAM
SUBCODE INTERFACE [DEMECC]
BUS CONTROL UNIT [BCU]
1Mbit DRAM
MP3/WMA DECORDER
FS CONVERTER [FSC]
SERIAL OUTPUT INTERFACE [DAO]
DIGITAL FILTER 1bitDAC PWM LOGIC [DF, MASH]
ANALOG LOWPASS FILTER
DIGITAL OUT
REGULATOR
CD SIGNAL
RCH
IC7001
MN6627954MA
SERVO PROCESSOR/ DIGITAL SIGNAL PROCESSOR/ DIGITAL FILTER D/A CONVERTER